ATTENTION: Read this document and the documents listed in the Additional Resources section about installation, configuration and operation of this equipment before you install, configure, operate or maintain this product. Users are required to familiarize themselves with installation and wiring instructions in addition to all applicable codes, laws, and standards.
Activities including installation, adjustments, putting into service, use, assembly, disassembly, and maintenance are required to be carried out by suitably trained personnel in accordance with applicable code of practice. If this equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
注意：在安装、配置、操作和维护本产品前，请阅读本文档以及 “其他资源” 部分列出的有关设备安装、配置和操作的相应文档。除了所有适用规范、法律和标准的相关要求之外，用户还必须熟悉安装和接线说明。
安装、调整、投运、使用、组装、拆卸和维护等各项操作必须由经过适当训练的专业人员按照适用的操作规范实施。
如果未按照制造商指定的方式使用该设备，则可能会损害设备提供的保护。
ATENCIÓN: Antes de instalar, configurar, poner en funcionamiento, operar o realizar mantenimiento de este producto, lea este documento y los documentos listados en la sección Recursos adicionales acerca de la instalación, configuración y operación de este equipo. Los usuarios deben familiarizarse con las instrucciones de instalación y cableado y con los requisitos de todos los códigos, leyes y estándares vigentes.
El personal debidamente capacitado debe realizar las actividades de instalación, ajustes, puesta en servicio, uso, ensamblaje, desensamblaje y mantenimiento de conformidad con el código de práctica aplicable. Si este equipo se usa de una manera no especificada por el fabricante, la protección provista por el equipo puede resultar afectada.
ATENÇÃO: Leia este e os demais documentos sobre instalação, configuração e operação do equipamento que estão na seção Recursos adicionais antes de instalar, configurar, operar ou manter este produto. Os usuários devem se familiarizar com as instruções de instalação e fiação além das exigências para todos os códigos, leis e normas aplicáveis.
É necessário que as atividades, instalação, ajustes, colocação em serviço, utilização, montagem, desmontagem e manutenção sejam realizadas por pessoal qualificado e especializado, de acordo com o código de prática aplicável.
Caso este equipamento seja utilizado de maneira não especificada, a proteção fornecida pelo equipamento poderá ser prejudicada.
ВНИМАНИЕ: Перед тем как устанавливать, настраивать, эксплуатировать или обслуживать данное оборудование, прочитайте этот документ и документы, перечисленные в разделе «Дополнительные ресурсы». В этих документах изложены сведения об установке, настройке и эксплуатации данного оборудования. Пользователи обязаны ознакомиться с инструкциями по установке и прокладке соединений, а также с требованиями всех применимых норм, законов и стандартов.
Все действия, включая установку, наладку, ввод в эксплуатацию, использование, сборку, разборку и техническое обслуживание, должны выполняться обученным персоналом в соответствии с применимыми нормами и правилами.
Если оборудование используется не предусмотренным производителем образом, защита оборудования может быть нарушена.
注意：本製品を設置、構成、稼動または保守する前に、本書および本機器の設置、設定、操作についての参考資料の該当箇所に記載されている文書に目を通してください。ユーザは、すべての該当する条例、法律、規格の要件に加えて、設置および配線の手順に習熟している必要があります。
設置調整、運転の開始、使用、組立て、解体、保守を含む諸作業は、該当する実施規則に従って訓練を受けた適切な作業員が実行する必要があります。
本機器が製造メーカにより指定されていない方法で使用されている場合、機器により提供されている保護が損なわれる恐れがあります。
ACHTUNG: Lesen Sie dieses Dokument und die im Abschnitt Weitere Informationen aufgeführten Dokumente, die Konfiguration und Betrieb dieses Produkts enthalten, bevor Sie dieses Produkt installieren, konfigurieren, bedienen oder warten. Anwender müssen sich neben den Vorschriften, Gesetzen und Normen zusätzlich mit den Installations- und Verdrahtungsanweisungen vertraut machen.
Arbeiten im Rahmen der Installation, Anpassung, Inbetriebnahme, Verwendung, Montage, Demontage oder Instandhaltung dürfen nur durch dafür ausgebildete und geschulte Mitarbeiter und in Übereinstimmung mit den anwendbaren Ausführungsvorschriften vorgenommen werden.
Wenn das Gerät in einer Weise verwendet wird, die vom Hersteller nicht vorgesehen ist, kann die Schutzfunktion beeinträchtigt s
ATTENTION: Lisez ce document et les documents listés dans la section Ressources complémentaires relatives à l'installation, la configuration et l'exploitation de cet équipement avant d installer, configurer, utiliser ou entretenir ce produit. Les utilisateurs doivent se familiariser avec les instructions d installation et de câblage en plus des exigences relatives aux codes, lois et normes en vigu
Les activités relatives à l'installation, le réglage, la mise en service, l'utilisation, l assemblage, le démontage et l'entretien doivent être réalisées par des personnes formées selon le code de pratique en vigueur.
Si cet équipement est utilisé d une façon qui n a pas été définie par le fabricant, la protection fournie par l équipement peut être compromise.
주의: 본 제품 설치, 설정, 작동 또는 유지 보수하기 전에 본 문서를 포함하여 설치, 설정 및 작동에 관한 참고 자료 섹션의 문서들을 반드시 읽고 숙지하십시오. 사용자는 모든 관련 규정, 법규 및 표준에서 요구하는 사항에 대해 반드시 설치 및 배선 지침을 숙지해야 합니다.
설치, 조정, 가동, 사용, 조립, 분해, 유지보수 등 모든 작업은 관련 규정에 따라 적절한 교육을 받은 사용자를 통해서만 수행해야 합니다.
본 장비를 제조사가 명시하지 않은 방법으로 사용하면 장비의 보호 기능이 손상될 수 있습니다.
ATTENZIONE: Prima di installare, configurare ed utilizzare il prodotto, leggere questo documento ed i documenti elencati nella sezione Altre risorse, riguardanti l installazione, la configurazione ed il funzionamento dell apparecchiatura. Gli utenti devono familiarizzare con le istruzioni di installazione e cablaggio, oltre ai requisiti previsti dalle leggi, codici e standard applicabili.
Le attività come installazione, regolazioni, utilizzo, assemblaggio e manutenzione devono essere eseguite da personale adeguatamente addestrato, nel rispetto delle procedure previste
Qualora l apparecchio venga utilizzato con modalità diverse da quelle previste dal produttore, la funzione di protezione fornita potrebbe venire compromessa.
DİKKAT: Bu ürünün kurulumu, kullanılması, yapılandırılması ve bakımından önce bu dokümanı ve bu ekipmanın kurulumu, yapılandırması, kullanımı ve bakımı için gerekli diğer dokümanları okuyun. Kullanıcılar yürürlükteki tüm yönetmelikler, yasalar ve standartlara ek olarak kurulum ve kablolama talimatlarına da uymalıdır.
Kurulum, ayarlama, hizmete alma, kullanma, birleştirme, parçalara ayırma ve bakım gibi aktiviteler sadece uygun eğitimi almış kişiler tarafından yürürlükteki uygulama yönetmeliklerine uygun şekilde yapılabilir.
Bu ekipman üretici tarafından belirlenen şekilde kullanılmazsa, ekipman tarafından sağlanan koruma bozulabilir.
注意事項：在安裝、設定、操作或維護本產品前，請先閱讀此文件以及列於 「其他資源」章節中有關安裝、設定與操作此設備的文件。使用者必須熟悉安裝和配線指示，並符合所有法規、法律和標準要求。
包括安裝、調整、交付使用、使用、組裝、拆卸和維護等動作都必須交由已經過適當訓練的人員進行，以符合適用的實作法規。
如果將設備用於非製造商指定的用途時，可能會造成設備所提供的保護功能受損。
POZOR: Než začnete instalovat, konfigurovat, provozovat nebo obsluhovat tento výrobek nebo provádět jeho údržbu, přečtěte si tento dokument a dokumenty uvedené v části Další zdroje obsahující informace o instalaci, konfiguraci a provozu tohoto zařízení. Uživatelé se musejí vedle jakýchkoli příslušných vyhlášek, zákonů a norem seznámit také s pokyny pro instalaci a elektrické zapojení.
Činnosti zahrnující instalaci, nastavení, uvedení do provozu, užívání, montáž, demontáž a údržbu musí provádět řádně vyškolení pracovníci v souladu s příslušnými předpisy.
Pokud se toto zařízení používá způsobem neodpovídajícím specifikaci výrobce, může být ochrana, kterou zařízení poskytuje, narušena.
UWAGA: Przed instalacją, konfiguracją, użytkowaniem lub konserwacją tego produktu należy zapoznać się z niniejszym dokumentem oraz wszystkimi dokumentami wymienionymi w sekcji Dodatkowe omawiające instalację, konfigurację, procedury użytkowania tego urządzenia. Użytkownicy mają obowiązek zapoznać się z instrukcjami dotyczącymi instalacji oraz oprzewodowania, jak również obowiązującymi kodeksami, prawem i normami.
Działania obejmujące instalację, regulację, przekazanie do użytkowania, użytkowanie, montaż, demontaż oraz konserwację muszą być wykonywane przez odpowiednio przeszkolony personel zgodnie z obowiązującym kodeksem postępowania.
Jeśli urządzenie jest wykorzystywane w sposób inny niż określony przez producenta, zabezpieczenie zapewniane przez urządzenie może zostać ograniczone.
OBS! Läs detta dokument samt dokumentet, som står listat i avsnittet Övriga resurser, om installation, konfiguration och drift av denna utrustning innan du installerar, konfigurerar eller börjar använda eller utföra underhållsarbete på produkten. Användare måste bekanta sig med instruktioner för installation och kabeldragning, förutom med tillämpliga koder, lagar och standarder.
Åtgärder som installation, justering, service, användning, montering, demontering och underhållsarbete måste utföras av personal med lämplig utbildning enligt lämpligt bruk.
Om denna utrustning används på ett sätt som inte anges av tillverkaren kan det hända att utrustningens skyddsanordningar inte fungerar korrekt.
LET OP: Lees dit document en de documenten die genoemd worden in de paragraaf Aanvullende informatie over de installatie, configuratie en bediening van deze apparatuur voordat u dit product installeert, configureert, bediend of onderhoudt. Gebruikers moeten zich vertrouwd maken met de installatie- en bedradingsinstructies naast de toepasselijke regels, wetten en normen.
Activiteiten zoals het installeren, afstellen, in gebruik stellen, gebruiken, monteren, demonteren en onderhoud uitvoeren moeten uitgevoerd worden door hiervoor opgeleid personeel in overeenstemming met de geldende praktijkregels.
Indien de apparatuur wordt gebruikt op een wijze die niet is gespecificeerd door de fabrikant, dan bestaat het gevaar dat de beveiliging door de apparatuur niet goed werkt.

Output Specifications – POINT I/O Module 1734-8CFG DC Output

Attribute	Value
On-state voltage range, min	10V DC
On-state voltage range, max	28.8V DC
On-state voltage range, nom	24V DC
On-state voltage drop, max	0.4V DC
On-state current, max	0.5 A
Off-state leakage, max	0.5 mA
Module current (all outputs), max	3.0 A
Surge current for 100 ms, repeatable every 2 s, max	1.0 A

General Specifications

Attribute	Value
Terminal base screw torque	0.5 0.6 N m (5 7 lb in)
Supply voltage, max	28.8V DC
Power dissipation, max	2.6 W @ 28.8V DC
Thermal dissipation, max	8.9 BTU/hr @ 28.8V DC
POINTBus current, max	100 mA @ 5V DC
Field power bus supply voltage, nom	24V DC
Field power bus voltage range	10 28.8V DC
Isolation voltage	50V (continuous), Reinforced insulation type Type tested at 2121V DC for 60 s, between field side and system side. No isolation between individual channels.
Input overvoltage protection	Reverse polarity protected
Dimensions (HxWxD), approx.	x 75 56 x 12 (2.2 x 0.47 x 2.97 in.)
Weight, approx.	34 g (1.20 oz.)
Wiring category (1)(2)	2 on signal ports
Wire size	Determined by installed terminal block
Enclosure type rating	None (open-style)
Keyswitch position	1
Pilot duty rating	Not rated

(1) Use this conductor category information for planning conductor routing as described in Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1
(2) Use this Conductor Category information for planning conductor routing as described in the appropriate System Level Installation Manual.

Environmental Specifications

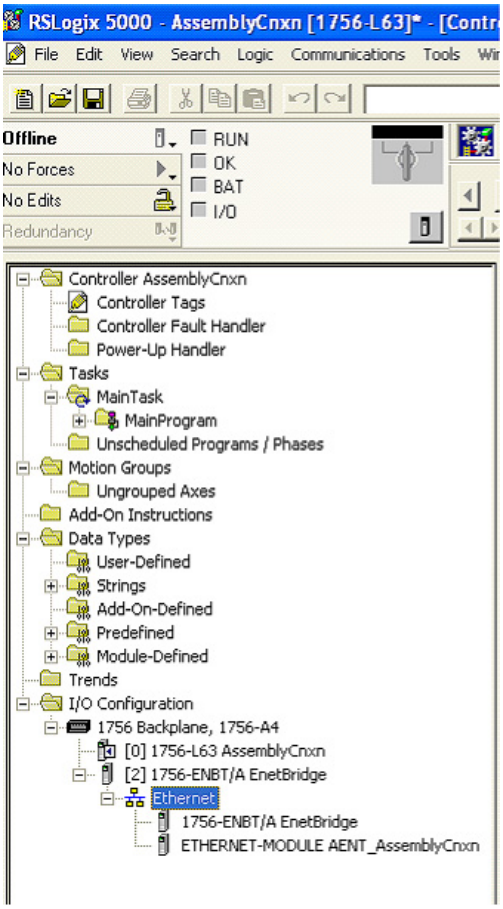
Attribute	Value
Temperature, operating	IEC 60068-2-1 (Test Ad, Operating Cold), IEC 60068-2-2 (Test Bd, Operating Dry Heat), IEC 60068-2-14 (Test Na, Operating Thermal Shock): -20 °C +55 °C (-4 °F +131 °C)
Temperature, surrounding air, max	55 °C (131 °F)
Temperature, nonoperating	IEC 60068-2-1 (Test Ab, Unpackaged Nonoperating Cold), IEC 60068-2-2 (Test Bb, Unpackaged Nonoperating Dry Heat), IEC 60068-2-14 (Test Na, Unpackaged Nonoperating Thermal Shock): -40 +85 °C (-40 +185 °F)
Relative humidity	IEC 60068-2-30 (Test Db, Unpackaged Damp Heat): 5 95% noncondensing
Vibration	IEC60068-2-6 (Test Fc, Operating): 5 g @ 10 500 Hz
Shock, operating	EC 60068-2-27 (Test Ea, Unpackaged Shock): 30 g
Shock, nonoperating	EC 60068-2-27 (Test Ea, Unpackaged Shock): 50 g
Emissions	IEC 61000-6-4
ESD immunity	IEC6100-4-2: 6 kV contact discharges 8 kV air discharges

Use an Assembly Connection with RSLogix5000

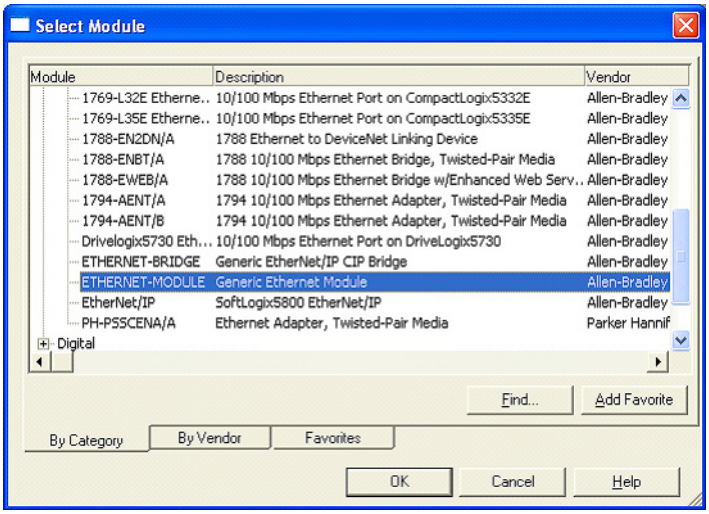
The Assembly connection can be used with RSLogix5000 and the Generic EtherNet/IP profile. When this connection is used in RSLogix5000, there are no intelligent Tags created for the adapter. All Input, Output, and Configuration data are in unstructured Tag arrays.

Add the Hardware to the I/O Configuration Tree

1. Add a new module to the Ethernet network in the I/O Configuration section of the Controller Organizer pane.



2. Select a Generic Ethernet Module.



Enter the Connection Parameters

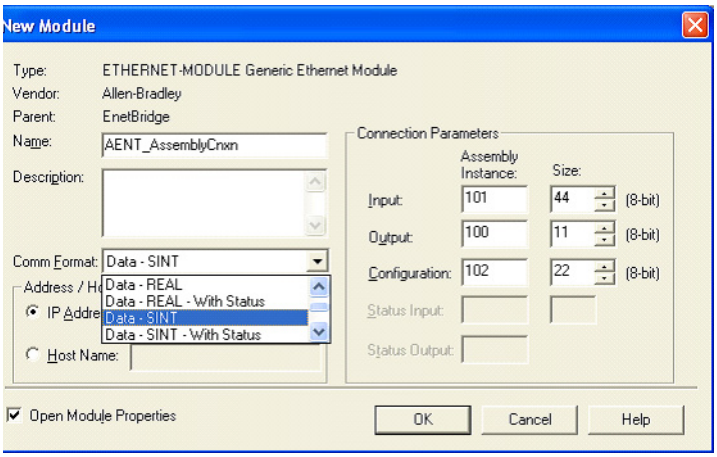
In the New Module Properties dialog, enter Connection Parameters, the Comm Format, the module's IP Address, and a name.

Enter a Name for the module that RSLogix 5000 uses in the tags that are created for this module. The Data - SINT Comm Format should be selected, indicating that all sizes are to be interpreted as a number of bytes. If this connection is a Listen only connection, select the Input Data - SINT Comm Format since it is otherwise not possible to enter an Output config assembly size of 0.

Next, enter the Assembly Instances for the desired connection as described in Connection Points. Enter the sizes (in bytes) for the Input and Output instances per your calculations. See Calculate the Connection Size for details on obtaining the sizes. If the optional status header is being used, its size (8 bytes) must be included in the Input Size. For RSLogix 5000 the Output Size does not include the Run/Idle header. Here the terms Input and Output refer to the adapter's Produced and Consumed data respectively.

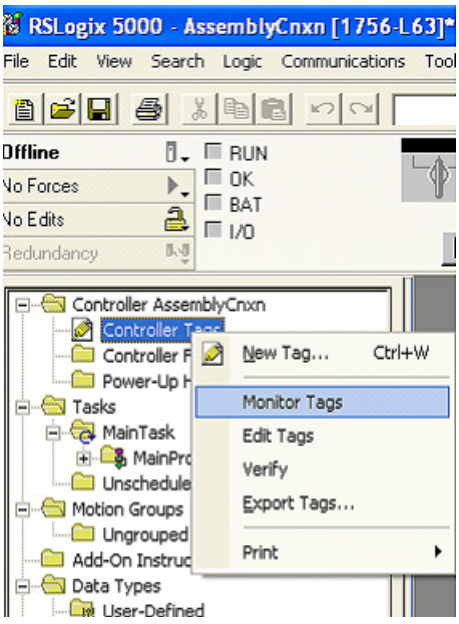
It is possible to make the connection without sending any configuration data. The adapter's Chassis Size can be set from its web page and the adapter will align produced and consumed data by default on byte boundaries. If these options and the default configuration of all I/O modules are acceptable, a 0 can be entered for the Configuration Size on the Module Properties dialog. The

configuration Assembly Instance must be entered even if the size is 0. The following section will describe the steps taken when configuration is needed.



Build the Configuration Tag

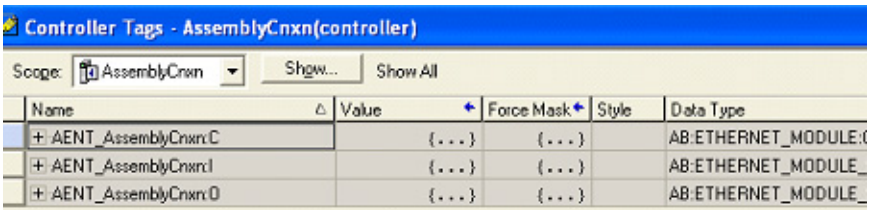
If any configuration is required, the minimum configuration header must be sent and then any individual module configuration may follow. Open the Controller Tags by right-clicking the Controller Tags option from the Controller Organizer pane. Select Monitor Tags.



Monitor Tags

You should see three Tags with the module's name. They will have an C, I, or O suffix denoting Configuration, Input, or Output respectively. Note that the I and O Tags are sized according to the sizes that were entered on the properties

page. The C Tag always has 400 bytes allocated for it regardless of the size specified.



Add Configuration Header

Bytes 0...9 must contain the minimum configuration header information described in Minimal Adapter Configuration Assembly. As can be seen from the figure below, the Chassis Size is set to 0x12 (18 decimal). The produced and consumed alignment choice is Double Word alignment which is enumerated as a 4. See the following table for valid alignment values.

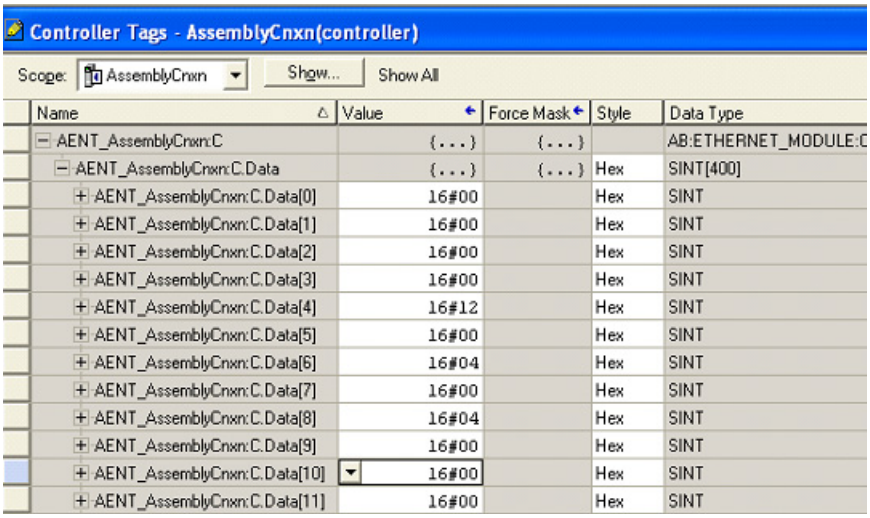


Table 5 - Alignment choices for configuration header

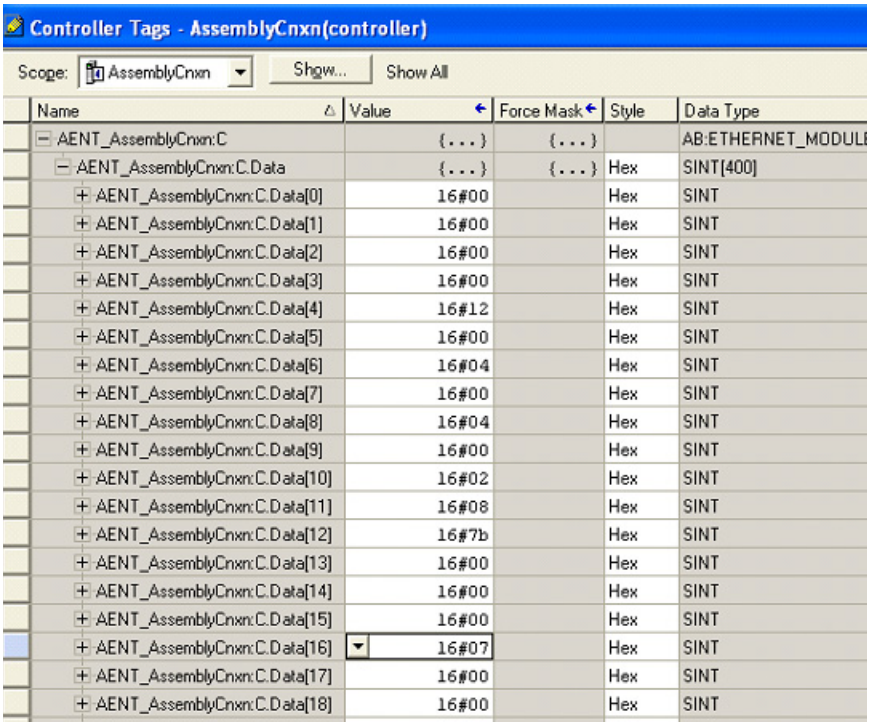
Alignment Choice	Value
Byte	0
Word	2
Double Word	4
Fixed size per slot	0xFF

Add I/O Module Configuration

If individual module configuration is required, it can be appended to the configuration header. In the example shown below a 1734-OB4E module is being configured. Byte 10 indicates that the data is to be sent to slot 2. Byte 11 specifies the size of the data as 8 bytes. Bytes 12 and 13 specify the OB4E module configuration assembly instance 0x7B. The instance number is entered in little endian (least significant byte first). In byte 16 the value of 7 indicates that when the module is in Idle mode, Hold Last State should be enabled for

channels 0, 1, and 2 but not channel 3. If more module configuration is needed, it could begin at byte 22 with the slot number of the next module to be configured.

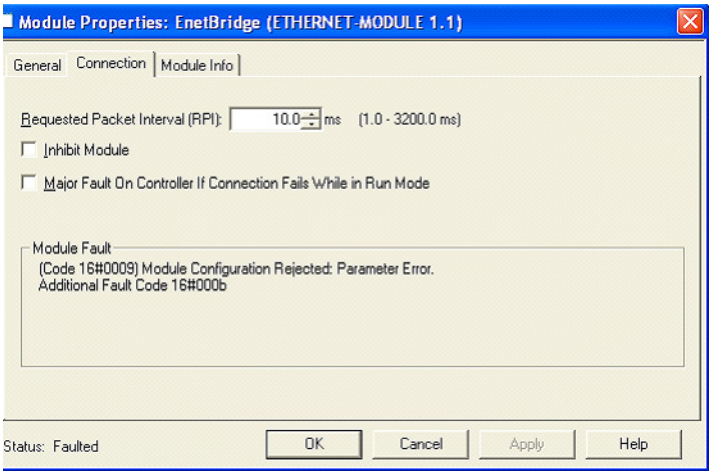
For more information on configuration, see 1734/1738 I/O Module Assembly Information.



After the configuration has been entered into the tag, remember to save the RSLogix 5000 project. The tags are only retained upon a save. Also remember that any configuration added here must be reflected in the Configuration Size of the Connection Parameters entered on the Module Properties dialog.

If any part of the configuration assembly is wrong (either the minimal assembly or a portion directed to an I/O module), the connection request will be rejected with the General Return Code indicating an Error in the Data

Segment (0x09). The Extended Error code will indicate the byte offset into the configuration data segment where the error was detected.



The error shown above was created by entering an invalid configuration assembly size on the Module Properties page. A size of 18 bytes was entered. The error here points to an offset of 0x000b (11 decimal). If we return to the configuration tag, byte 0x000b is the location that contains the size of the I/O module configuration. The header is 10 bytes and the module has 8 bytes of configuration. However, we have neglected to add the 4 bytes of overhead needed to describe the slot 2 configuration. When the adapter parsed the configuration assembly to byte 0x000b it saw that it needed 8 more bytes of information. It had already parsed through byte 11, therefore 18 would not be an adequate size. The adapter returns the offset of the first byte where the error is detected (0x000b).

Assembly Structure

Assembly Structure Examples

Byte, Word, and Double Word Alignment

The following chassis is used to demonstrate how the data is aligned for the Byte, Word, and Double Word alignment options. This chassis was intentionally assembled as shown to demonstrate as many use cases as possible. Discrete and analog modules are intermixed. An ARM module is used to reserve space for a future device. The 1734-IB4D module in slot 8 is configured to produce 2 bytes while the IB4D module in slot 7 is configured to produce 1 byte. The ASCII module in slot 10 is configured to produce 9 bytes.

Table 6 - Example POINT system

Cat #	AENT	IB4	IB8	IB2	OB2E	OB4E	OB8E	IB4D	IB4D	IE2C	ASC	ARM	OW4	IB4
Slot #	0	1	2	3	4	5	6	7	8	9	10	11	12	13

Table 7 - Produced Assembly, Byte Aligned

Byte	Bit 7	Bit 6	Bit5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Produce 0	Slot 7 status	Slot 6 status	Slot 5 status	Slot 4 status	Slot 3 status	Slot 2 status	Slot1 status	Slot 0 status
Produce 1	Slot 15 status	Slot 14 status	Slot 13 status	Slot 12 status	Slot 11 status	Slot 10 status	Slot 9 status	Slot 8 status
Produce 2	Slot 23 status	Slot 22 status	Slot 21 status	Slot 20 status	Slot 19 status	Slot 18 status	Slot 17 status	Slot 16 status
Produce 3	Slot 31 status	Slot 30 status	Slot 29 status	Slot 28 status	Slot 27 status	Slot 26 status	Slot 25 status	Slot 24 status
Produce 4	Slot 39 status	Slot 38 status	Slot 37 status	Slot 36 status	Slot 35 status	Slot 34 status	Slot 33 status	Slot 32 status
Produce 5	Slot 47 status	Slot 46 status	Slot 45 status	Slot 44 status	Slot 43 status	Slot 42 status	Slot 41 status	Slot 40 status
Produce 6	Slot 55 status	Slot 54 status	Slot 53 status	Slot 52 status	Slot 51 status	Slot 50 status	Slot 49 status	Slot 48 status
Produce 7	Slot 63 status	Slot 62 status	Slot 61 status	Slot 60 status	Slot 59 status	Slot 58 status	Slot 57 status	Slot 56 status
Produce 8	Reserved				Slot 1 Bit 3	Slot 1 Bit 2	Slot 1 Bit 1	Slot 1 Bit 0
Produce 9	Slot 2 Bit 7	Slot 2 Bit 6	Slot 2 Bit 5	Slot 2 Bit 4	Slot 2 Bit 3	Slot 2 Bit 2	Slot 2 Bit 1	Slot 2 Bit 0
Produce 10	Reserved						Slot 3 Bit 1	Slot 3 Bit 0
Produce 11	Reserved						Slot 4 Bit 1	Slot 4 Bit 0
Produce 12	Reserved				Slot 5 Bit 3	Slot 5 Bit 2	Slot 5 Bit 1	Slot 5 Bit 0
Produce 13	Slot 6 Bit 7	Slot 6 Bit 6	Slot 6 Bit 6	Slot 6 Bit 4	Slot 6 Bit 3	Slot 6 Bit 2	Slot 6 Bit 1	Slot 6 Bit 0
Produce 14	Slot 7 Bit 7	Slot 7 Bit 6	Slot 7 Bit 5	Slot 7 Bit 4	Slot 7 Bit 3	Slot 7 Bit 2	Slot 7 Bit 1	Slot 7 Bit 0
Produce 15	Slot 8 Bit 7	Slot 8 Bit 6	Slot 8 Bit 5	Slot 8 Bit 4	Slot 8 Bit 3	Slot 8 Bit 2	Slot 8 Bit 1	Slot 8 Bit 0
Produce 16	Slot 8 Bit 15	Slot 8 Bit 14	Slot 8 Bit 13	Slot 8 Bit 12	Slot 8 Bit 11	Slot 8 Bit 10	Slot 8 Bit 9	Slot 8 Bit 8
Produce 17	Slot 9 Channel 0 - Low Byte							

Table 7 - Produced Assembly, Byte Aligned

Byte	Bit 7	Bit 6	Bit5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Produce 18	Slot 9 Channel 0 - High Byte							
Produce 19	Slot 9 Channel 1 - Low Byte							
Produce 20	Slot 9 Channel 1 - High Byte							
Produce 21	Slot 9 Channel 0 - Status							
Produce 22	Slot 9 Channel 1 - Status							
Produce 23	Slot 10 ASCII Data 1							
Produce 24	Slot 10 ASCII Data 2							
Produce 25	Slot 10 ASCII Data 3							
Produce 26	Slot 10 ASCII Data 4							
Produce 27	Slot 10 ASCII Data 5							
Produce 28	Slot 10 ASCII Data 6							
Produce 29	Slot 10 ASCII Data 7							
Produce 30	Slot 10 ASCII Data 8							
Produce 31	Slot 10 ASCII Data End of String Delimiter							
Produce 32	Slot 11 ARM - Reserved Byte							
Produce 33	Reserved				Slot 13 Bit 3	Slot 13 Bit 2	Slot 13 Bit 1	Slot 13 Bit 0

Table 8 - Consumed Assembly, Byte Aligned

Byte	Bit 7	Bit 6	Bit5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Consume 0	Reserved							Run/Idle
Consume 1	Reserved							
Consume 2	Reserved							
Consume 3	Reserved							
Consume 4	Reserved						Slot 4 Bit 1	Slot 4 Bit 0
Consume 5	Reserved				Slot 5 Bit 3	Slot 5 Bit 2	Slot 5 Bit 1	Slot 5 Bit 0
Consume 6	Slot 6 Bit 7	Slot 6 Bit 6	Slot 6 Bit 5	Slot 6 Bit 4	Slot 6 Bit 3	Slot 6 Bit 2	Slot 6 Bit 1	Slot 6 Bit 0
Consume 7	Slot 10 ASCII Data 1							
Consume 8	Slot 10 ASCII Data 2							
Consume 9	Slot 10 ASCII Data 3							
Consume 10	Slot 10 ASCII Data 4							
Consume 11	Slot 10 ASCII Data 5							
Consume 12	Slot 10 ASCII Data End of String Delimiter							
Consume 13	Reserved				Slot 12 Bit 3	Slot 12 Bit 2	Slot 12 Bit 1	Slot 12 Bit 0

Table 9 - Produced Assembly, Word Aligned

Byte	Bit 7	Bit 6	Bit5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Produce 0	Slot 7 status	Slot 6 status	Slot 5 status	Slot 4 status	Slot 3 status	Slot 2 status	Slot1 status	Slot 0 status
Produce 1	Slot 15 status	Slot 14 status	Slot 13 status	Slot 12 status	Slot 11 status	Slot 10 status	Slot 9 status	Slot 8 status
Produce 2	Slot 23 status	Slot 22 status	Slot 21 status	Slot 20 status	Slot 19 status	Slot 18 status	Slot 17 status	Slot 16 status

Table 9 - Produced Assembly, Word Aligned

Byte	Bit 7	Bit 6	Bit5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Produce 3	Slot 31 status	Slot 30 status	Slot 29 status	Slot 28 status	Slot 27 status	Slot 26 status	Slot 25 status	Slot 24 status
Produce 4	Slot 39 status	Slot 38 status	Slot 37 status	Slot 36 status	Slot 35 status	Slot 34 status	Slot 33 status	Slot 32 status
Produce 5	Slot 47 status	Slot 46 status	Slot 45 status	Slot 44 status	Slot 43 status	Slot 42 status	Slot 41 status	Slot 40 status
Produce 6	Slot 55 status	Slot 54 status	Slot 53 status	Slot 52 status	Slot 51 status	Slot 50 status	Slot 49 status	Slot 48 status
Produce 7	Slot 63 status	Slot 62 status	Slot 61 status	Slot 60 status	Slot 59 status	Slot 58 status	Slot 57 status	Slot 56 status
Produce 8	Reserved				Slot 1 Bit 3	Slot 1 Bit 2	Slot 1 Bit 1	Slot 1 Bit 0
Produce 9	Slot 2 Bit 7	Slot 2 Bit 6	Slot 2 Bit 5	Slot 2 Bit 4	Slot 2 Bit 3	Slot 2 Bit 2	Slot 2 Bit 1	Slot 2 Bit 0
Produce 10	Reserved						Slot 3 Bit 1	Slot 3 Bit 0
Produce 11	Reserved						Slot 4 Bit 1	Slot 4 Bit 0
Produce 12	Reserved				Slot 5 Bit 3	Slot 5 Bit 2	Slot 5 Bit 1	Slot 5 Bit 0
Produce 13	Slot 6 Bit 7	Slot 6 Bit 6	Slot 6 Bit 6	Slot 6 Bit 4	Slot 6 Bit 3	Slot 6 Bit 2	Slot 6 Bit 1	Slot 6 Bit 0
Produce 14	Slot 7 Bit 7	Slot 7 Bit 6	Slot 7 Bit 5	Slot 7 Bit 4	Slot 7 Bit 3	Slot 7 Bit 2	Slot 7 Bit 1	Slot 7 Bit 0
Produce 15	Pad							
Produce 16	Slot 8 Bit 7	Slot 8 Bit 6	Slot 8 Bit 5	Slot 8 Bit 4	Slot 8 Bit 3	Slot 8 Bit 2	Slot 8 Bit 1	Slot 8 Bit 0
Produce 17	Slot 8 Bit 15	Slot 8 Bit 14	Slot 8 Bit 13	Slot 8 Bit 12	Slot 8 Bit 11	Slot 8 Bit 10	Slot 8 Bit 9	Slot 8 Bit 8
Produce 18	Slot 9 Channel 0 - Low Byte							
Produce 19	Slot 9 Channel 0 - High Byte							
Produce 20	Slot 9 Channel 1 - Low Byte							
Produce 21	Slot 9 Channel 1 - High Byte							
Produce 22	Slot 9 Channel 0 - Status							
Produce 23	Slot 9 Channel 1 - Status							
Produce 24	Slot 10 ASCII Data 1							
Produce 25	Slot 10 ASCII Data 2							
Produce 26	Slot 10 ASCII Data 3							
Produce 27	Slot 10 ASCII Data 4							
Produce 28	Slot 10 ASCII Data 5							
Produce 29	Slot 10 ASCII Data 6							
Produce 30	Slot 10 ASCII Data 7							
Produce 31	Slot 10 ASCII Data 8							
Produce 32	Slot 10 ASCII Data End of String Delimiter							
Produce 33	Slot 11 ARM - Reserved Byte							
Produce 34	Reserved				Slot 13 Bit 3	Slot 13 Bit 2	Slot 13 Bit 1	Slot 13 Bit 0

Table 10 - Consumed Assembly, Word Aligned

Byte	Bit 7	Bit 6	Bit5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Consume 0	Reserved							Run/Idle
Consume 1	Reserved							
Consume 2	Reserved							
Consume 3	Reserved							
Consume 4	Reserved						Slot 4 Bit 1	Slot 4 Bit 0

Table 10 - Consumed Assembly, Word Aligned

Byte	Bit 7	Bit 6	Bit5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Consume 5	Reserved				Slot 5 Bit 3	Slot 5 Bit 2	Slot 5 Bit 1	Slot 5 Bit 0
Consume 6	Slot 6 Bit 7	Slot 6 Bit 6	Slot 6 Bit 5	Slot 6 Bit 4	Slot 6 Bit 3	Slot 6 Bit 2	Slot 6 Bit 1	Slot 6 Bit 0
Consume 7	Pad							
Consume 8	Slot 10 ASCII Data 1							
Consume 9	Slot 10 ASCII Data 2							
Consume 10	Slot 10 ASCII Data 3							
Consume 11	Slot 10 ASCII Data 4							
Consume 12	Slot 10 ASCII Data 5							
Consume 13	Slot 10 ASCII Data End of String Delimiter							
Consume 14	Reserved				Slot 12 Bit 3	Slot 12 Bit 2	Slot 12 Bit 1	Slot 12 Bit 0

Table 11 - Produced Assembly, Double Word Aligned

Byte	Bit 7	Bit 6	Bit5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Produce 0	Slot 7 status	Slot 6 status	Slot 5 status	Slot 4 status	Slot 3 status	Slot 2 status	Slot1 status	Slot 0 status
Produce 1	Slot 15 status	Slot 14 status	Slot 13 status	Slot 12 status	Slot 11 status	Slot 10 status	Slot 9 status	Slot 8 status
Produce 2	Slot 23 status	Slot 22 status	Slot 21 status	Slot 20 status	Slot 19 status	Slot 18 status	Slot 17 status	Slot 16 status
Produce 3	Slot 31 status	Slot 30 status	Slot 29 status	Slot 28 status	Slot 27 status	Slot 26 status	Slot 25 status	Slot 24 status
Produce 4	Slot 39 status	Slot 38 status	Slot 37 status	Slot 36 status	Slot 35 status	Slot 34 status	Slot 33 status	Slot 32 status
Produce 5	Slot 47 status	Slot 46 status	Slot 45 status	Slot 44 status	Slot 43 status	Slot 42 status	Slot 41 status	Slot 40 status
Produce 6	Slot 55 status	Slot 54 status	Slot 53 status	Slot 52 status	Slot 51 status	Slot 50 status	Slot 49 status	Slot 48 status
Produce 7	Slot 63 status	Slot 62 status	Slot 61 status	Slot 60 status	Slot 59 status	Slot 58 status	Slot 57 status	Slot 56 status
Produce 8	Reserved				Slot 1 Bit 3	Slot 1 Bit 2	Slot 1 Bit 1	Slot 1 Bit 0
Produce 9	Slot 2 Bit 7	Slot 2 Bit 6	Slot 2 Bit 5	Slot 2 Bit 4	Slot 2 Bit 3	Slot 2 Bit 2	Slot 2 Bit 1	Slot 2 Bit 0
Produce 10	Reserved						Slot 3 Bit 1	Slot 3 Bit 0
Produce 11	Reserved						Slot 4 Bit 1	Slot 4 Bit 0
Produce 12	Reserved				Slot 5 Bit 3	Slot 5 Bit 2	Slot 5 Bit 1	Slot 5 Bit 0
Produce 13	Slot 6 Bit 7	Slot 6 Bit 6	Slot 6 Bit 6	Slot 6 Bit 4	Slot 6 Bit 3	Slot 6 Bit 2	Slot 6 Bit 1	Slot 6 Bit 0
Produce 14	Slot 7 Bit 7	Slot 7 Bit 6	Slot 7 Bit 5	Slot 7 Bit 4	Slot 7 Bit 3	Slot 7 Bit 2	Slot 7 Bit 1	Slot 7 Bit 0
Produce 15	Pad							
Produce 16	Slot 8 Bit 7	Slot 8 Bit 6	Slot 8 Bit 5	Slot 8 Bit 4	Slot 8 Bit 3	Slot 8 Bit 2	Slot 8 Bit 1	Slot 8 Bit 0
Produce 17	Slot 8 Bit 15	Slot 8 Bit 14	Slot 8 Bit 13	Slot 8 Bit 12	Slot 8 Bit 11	Slot 8 Bit 10	Slot 8 Bit 9	Slot 8 Bit 8
Produce 18	Pad							
Produce 19	Pad							
Produce 20	Slot 9 Channel 0 - Low Byte							
Produce 21	Slot 9 Channel 0 - High Byte							
Produce 22	Slot 9 Channel 1 - Low Byte							
Produce 23	Slot 9 Channel 1 - High Byte							
Produce 24	Slot 9 Channel 0 - Status							
Produce 25	Slot 9 Channel 1 - Status							
Produce 26	Pad							

Table 11 - Produced Assembly, Double Word Aligned

Byte	Bit 7	Bit 6	Bit5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Produce 27	Pad							
Produce 28	Slot 10 ASCII Data 1							
Produce 29	Slot 10 ASCII Data 2							
Produce 30	Slot 10 ASCII Data 3							
Produce 31	Slot 10 ASCII Data 4							
Produce 32	Slot 10 ASCII Data 5							
Produce 33	Slot 10 ASCII Data 6							
Produce 34	Slot 10 ASCII Data 7							
Produce 35	Slot 10 ASCII Data 8							
Produce 36	Slot 10 ASCII Data End of String Delimiter							
Produce 37	Slot 11 ARM - Reserved Byte							
Produce 38	Reserved				Slot 13 Bit 3	Slot 13 Bit 2	Slot 13 Bit 1	Slot 13 Bit 0

Table 12 - Consumed Assembly, Double Word Aligned

Byte	Bit 7	Bit 6	Bit5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Consume 0	Reserved							Run/Idle
Consume 1	Reserved							
Consume 2	Reserved							
Consume 3	Reserved							
Consume 4	Reserved						Slot 4 Bit 1	Slot 4 Bit 0
Consume 5	Reserved				Slot 5 Bit 3	Slot 5 Bit 2	Slot 5 Bit 1	Slot 5 Bit 0
Consume 6	Slot 6 Bit 7	Slot 6 Bit 6	Slot 6 Bit 5	Slot 6 Bit 4	Slot 6 Bit 3	Slot 6 Bit 2	Slot 6 Bit 1	Slot 6 Bit 0
Consume 7	Pad							
Consume 8	Slot 10 ASCII Data 1							
Consume 9	Slot 10 ASCII Data 2							
Consume 10	Slot 10 ASCII Data 3							
Consume 11	Slot 10 ASCII Data 4							
Consume 12	Slot 10 ASCII Data 5							
Consume 13	Slot 10 ASCII Data End of String Delimiter							
Consume 14	Reserved				Slot 12 Bit 3	Slot 12 Bit 2	Slot 12 Bit 1	Slot 12 Bit 0

Fixed Size per Slot Alignment

The following chassis is used to demonstrate how the Fixed Size per Slot alignment option might be used. This chassis is built to show a machine that sometimes uses 5 analog modules, but usually only needs 3 modules. In order to maintain data structure consistency (and therefore the same control logic),

Fixed Size per Slot alignment of 6 bytes is used and the unused slots are populated with Address Reserve Modules.

Table 13 - Example POINT system with unused slots

Cat #	ANT	IE2C	IE2C	IE2C	ARM	ARM	IB4	IB4	IB4
Slot #	0	1	2	3	4	5	6	7	8

Table 14 - Produced Assembly, Fixed Size per Slot Alignment

Byte	Bit 7	Bit 6	Bit5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Produce 0	Slot 7 status	Slot 6 status	Slot 5 status	Slot 4 status	Slot 3 status	Slot 2 status	Slot1 status	Slot 0 status
Produce 1	Slot 15 status	Slot 14 status	Slot 13 status	Slot 12 status	Slot 11 status	Slot 10 status	Slot 9 status	Slot 8 status
Produce 2	Slot 23 status	Slot 22 status	Slot 21 status	Slot 20 status	Slot 19 status	Slot 18 status	Slot 17 status	Slot 16 status
Produce 3	Slot 31 status	Slot 30 status	Slot 29 status	Slot 28 status	Slot 27 status	Slot 26 status	Slot 25 status	Slot 24 status
Produce 4	Slot 39 status	Slot 38 status	Slot 37 status	Slot 36 status	Slot 35 status	Slot 34 status	Slot 33 status	Slot 32 status
Produce 5	Slot 47 status	Slot 46 status	Slot 45 status	Slot 44 status	Slot 43 status	Slot 42 status	Slot 41 status	Slot 40 status
Produce 6	Slot 55 status	Slot 54 status	Slot 53 status	Slot 52 status	Slot 51 status	Slot 50 status	Slot 49 status	Slot 48 status
Produce 7	Slot 63 status	Slot 62 status	Slot 61 status	Slot 60 status	Slot 59 status	Slot 58 status	Slot 57 status	Slot 56 status
Produce 8	Slot 1 Channel 0 - Low Byte							
Produce 9	Slot 1 Channel 0 - High Byte							
Produce 10	Slot 1 Channel 1 - Low Byte							
Produce 11	Slot 1 Channel 1 - High Byte							
Produce 12	Slot 1 Channel 0 - Status							
Produce 13	Slot 1 Channel 1 - Status							
Produce 14	Slot 2 Channel 0 - Low Byte							
Produce 15	Slot 2 Channel 0 - High Byte							
Produce 16	Slot 2 Channel 1 - Low Byte							
Produce 17	Slot 2 Channel 1 - High Byte							
Produce 18	Slot 2 Channel 0 - Status							
Produce 19	Slot 2 Channel 1 - Status							
Produce 20	Slot 3 Channel 0 - Low Byte							
Produce 21	Slot 3 Channel 0 - High Byte							
Produce 22	Slot 3 Channel 1 - Low Byte							
Produce 23	Slot 3 Channel 1 - High Byte							
Produce 24	Slot 3 Channel 0 - Status							
Produce 25	Slot 3 Channel 1 - Status							
Produce 26	Slot 4 ARM - Reserved Byte							
Produce 27	Slot 4 ARM - Reserved Byte							
Produce 28	Slot 4 ARM - Reserved Byte							
Produce 29	Slot 4 ARM - Reserved Byte							
Produce 30	Slot 4 ARM - Reserved Byte							
Produce 31	Slot 4 ARM - Reserved Byte							

Table 14 - Produced Assembly, Fixed Size per Slot Alignment

Byte	Bit 7	Bit 6	Bit5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Produce 32	Slot 5 ARM - Reserved Byte							
Produce 33	Slot 5 ARM - Reserved Byte							
Produce 34	Slot 5 ARM - Reserved Byte							
Produce 35	Slot 5 ARM - Reserved Byte							
Produce 36	Slot 5 ARM - Reserved Byte							
Produce 37	Slot 5 ARM - Reserved Byte							
Produce 38	Reserved				Slot 6 Bit 3	Slot 6 Bit 2	Slot 6 Bit 1	Slot 6 Bit 0
Produce 39	Pad							
Produce 40	Pad							
Produce 41	Pad							
Produce 42	Pad							
Produce 43	Pad							
Produce 44					Slot 7 Bit 3	Slot 7 Bit 2	Slot 7 Bit 1	Slot 7 Bit 0
Produce 45	Pad							
Produce 46	Pad							
Produce 47	Pad							
Produce 48	Pad							
Produce 49	Pad							
Produce 50					Slot 8 Bit 3	Slot 8 Bit 2	Slot 8 Bit 1	Slot 8 Bit 0
Produce 51	Pad							
Produce 52	Pad							
Produce 53	Pad							
Produce 54	Pad							
Produce 55	Pad							

Table 15 - Consumed Assembly, Fixed Size per Slot Alignment

Byte	Bit 7	Bit 6	Bit5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Consume 0	Reserved							
Consume 1	Reserved							
Consume 2	Reserved							
Consume 3	Reserved							
Consume 4	Pad							
Consume 5	Pad							
Consume 6	Pad							
Consume 7	Pad							
Consume 8	Pad							
Consume 9	Pad							
Consume 10	Pad							
Consume 11	Pad							
Consume 12	Pad							

Table 15 - Consumed Assembly, Fixed Size per Slot Alignment

Byte	Bit 7	Bit 6	Bit5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Consume 13	Pad							
Consume 14	Pad							
Consume 15	Pad							
Consume 16	Pad							
Consume 17	Pad							
Consume 18	Pad							
Consume 19	Pad							
Consume 20	Pad							
Consume 21	Pad							
Consume 22	Pad							
Consume 23	Pad							
Consume 24	Pad							
Consume 25	Pad							
Consume 26	Pad							
Consume 27	Pad							
Consume 28	Pad							
Consume 29	Pad							
Consume 30	Pad							
Consume 31	Pad							
Consume 32	Pad							
Consume 33	Pad							
Consume 34	Pad							
Consume 35	Pad							
Consume 36	Pad							
Consume 37	Pad							
Consume 38	Pad							
Consume 39	Pad							
Consume 40	Pad							
Consume 41	Pad							
Consume 42	Pad							
Consume 43	Pad							
Consume 44	Pad							
Consume 45	Pad							
Consume 46	Pad							
Consume 47	Pad							
Consume 48	Pad							
Consume 49	Pad							
Consume 50	Pad							
Consume 51	Pad							

Table 16 - Configuration Assembly

Byte	Bit 7	Bit 6	Bit5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Config 0	Reserved							CRN
Config 1	Reserved							
Config 2	Reserved							
Config 3	Reserved							
Config 4	Chassis Size (Low Byte)							
Config 5	Chassis Size (High Byte)							
Config 6	Alignment for Produced Assembly (T->O)							
Config 7	Size per Slot (T->O)							
Config 8	Alignment for Produced Assembly (O->T)							
Config 9	Size per Slot (O->T)							

Notes:

1734/1738 I/O Module Assembly Information

Module Assembly Information

Discrete Modules

Table 17 - POINT I/O and ArmorPOINT I/O Discrete I/O modules

Cat. No	Description	Configuration Assembly Instance	Configuration Size	Produced Size	Consumed Size
1734-IB2 1738-IB2	2 point DC sink input	103	8	1	0
1734-IB4 1738-IB4	4 point DC sink input	103	16	1	0
1734-IB4D 1738-IB4D	2 point DC sink input with diagnostics	103	18	2,1	0
1734-IB8 1738-IB8	8 point DC sink input	103	32	1	0
1734-IV2	2 point DC source input	103	8	1	0
1734-IV4 1738-IV4	4 point DC source input	103	16	1	0
1734-IV8 1738-IV8	8 point DC source input	103	32	1	0
1734-OB2E 1738-OB2E	2 point DC source output	123	8	1	1
1734-OB4E 1738-OB4E	4 point DC source output	123	8	1	1
1734-OB2	2 point DC source output	123	8	1(1)	1
1734-OB4	4 point DC source output	123	8	1	1
1734-OB8	8 point DC source output	123	8	1	1
1734-OB8E 1738-OB8E	8 point DC source output	123	8	1	1
1734-OW2	2 point relay output	103	4	0	1
1734-OW4 1738-OW4	4 point relay output	103	4	0	1
1734-OV2E	2 point 24V DC sink output	123	8	1	1
1734-OV4E 1738-OV4E	4 point 24V DC sink output	123	8	1	1
1734-OV8E	8 point 24V DC sink output	123	8	1	1
1734-OX2	2 point Form C Relay output	103	4	0	1
1734-OB2EP 1738-OB2EP	2 point 24V DC 2A Protected output	123	8	1	1
1734-IA2 1738-IA2	2 point 120V AC input	103	8	1	0

Table 17 - POINT I/O and ArmorPOINT I/O Discrete I/O modules

Cat. No	Description	Configuration Assembly Instance	Configuration Size	Produced Size	Consumed Size
1734-IA4	4 point 120V AC input	103	16	1	0
1734-IM2	2 point 220V AC input	103	8	1	0
1734-IM4	4 point 220V AC input	103	16	1	0
1734-OA2 1738-OA2	2 point 120V/220V AC output	103	4	0	1
1734-OA4	4-channel 120V/220V AC output	103	4	0	1
1738-IB16	16 point 24V DC sink input	103	6	2,3	0
1738-OB16	16 point 24V DC source input	123	2	1	2
1734-8CFG 1738-8CFG	8 point 24V DC configurable sink input/source output	103	8	1	1

(1) While these modules (OB2, OB4, and OB8) have no meaningful data, they return a byte of 0 to be compatible with the "E" modules. In this manner they can be interchanged. Also these modules expect the same 8-byte configuration assembly even though only the first 4 bytes are meaningful.

Analog and Specialty I/O Modules

Table 18 - POINT and ArmorPOINT Analog and Specialty I/O modules

Cat. No	Description	Configuration Assembly Instance	Configuration Size	Produced Size	Consumed Size
1734-VHSC5	1 point 5V, 2 out very high speed counter	108	54	6	2,2,4
1734-VHSC24 1738-VHSC24	1 point 24V, 2 out very high speed counter	108	54	6	2,2,4
1734-IJ 1738-IJ	1 point 5V counter	123	18	6	1
1734-IK	1 point 24V counter	123	18	6	1
1734-IE2C 1738-IE2C	2 point analog current input	123	38	6	0
1734-IE4C 1738-IE4C	4 point analog current input	123	74	12	0
1734-IE8C	8 point analog current input	123	146	24	0
1734-OE2C 1738-OE2C	2 point analog current output	123	36	2	4
1734-OE4C 1738-OE4C	4 point analog current output	123	72	4	8
1734-IT21 1738-IT21	2 point thermocouple input	103	46	8	0
1734-IR2 1738-IR2	2 channel, 2point RTD input	123	38	6	0
1734-IR2E	2 point enhanced RTD input	123	38	6	0
1734-IE2V 1738-IE2V	2 point analog voltage input	123	38	6	0
1734-OE2V 1738-OE2V	2 point analog voltage output	123	36	2	4

Table 18 - POINT and ArmorPOINT Analog and Specialty I/O modules

Cat. No	Description	Configuration Assembly Instance	Configuration Size	Produced Size	Consumed Size
1734-SSI 1738-SSI	POINT I/O synchronous serial interface	123	26	10	2
1734-232ASC 1738-232ASC	POINT I/O RS232 ASCII interface	103	18	4…132 default = 24	4…132 default = 24
1734-485ASC 1738-485ASC	POINT I/O RS485 ASCII interface	103	18	4…132 default = 24	4…132 default = 24
1734-ARM	Address reserve	N/A	0	1	0

Data Format

The POINT I/O products specify multi-byte data values in little endian format. The term little endian refers to the ordering method in which:

- The least significant byte of a data item is ordered first.
- The most significant byte of a data item is ordered last
- All bytes in between are ordered sequentially, from least significant byte to most significant byte.

Layout for 16 bit numbers:

TagName[Low Byte]
TabName[High Byte]

Layout for 32 bit numbers:

TagName[Low Byte]
TagName
TagName
TabName[High Byte]

Layout for Array data:

TagName[0]
TagName[1]
TagName[2]
: :
TabName[N]

Module Specific Details

Two-channel Discrete Input Modules

All two-channel discrete input modules use the same configuration and input assemblies. Use the tables shown below for the following modules:

- 1734-IB2 or 1738-IB2
- 1734-IV2 or 1738-IV2
- 1734-IA2 or 1738-IA2
- 1734-IM2 or 1738-IM2

Table 19 - Configuration Assembly Instance 103

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Input 0 Off to On Filter Low Byte							
1	Input 0 Off to On Filter High Byte							
2	Input 0 On to Off Filter Low Byte							
3	Input 0 On to Off Filter High Byte							
4	Input 1 Off to On Filter Low Byte							
5	Input 1 Off to On Filter High Byte							
6	Input 1 On to Off Filter Low Byte							
7	Input 1 On to Off Filter High Byte							

Table 20 - Produced Input Data Assembly 2

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved					Ch 1	Ch 0	

Four-channel Discrete Input Modules

All four channel discrete input modules use the same configuration and input assemblies. Use the tables shown below for the following modules:

- 1734-IB4 or 1738-IB4
- 1734-IV4 or 1738-IV4
- 1734-IA4 or 1738-IA4
- 1734-IM4 or 1738-IM4

Table 21 - Configuration Assembly Instance 103

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Input 0 Off to On Filter Low Byte							
1	Input 0 Off to On Filter High Byte							
2	Input 0 On to Off Filter Low Byte							
3	Input 0 On to Off Filter High Byte							
4	Input 1 Off to On Filter Low Byte							
5	Input 1 Off to On Filter High Byte							
6	Input 1 On to Off Filter Low Byte							
7	Input 1 On to Off Filter High Byte							

Table 21 - Configuration Assembly Instance 103

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
8	Input 2 Off to On Filter Low Byte							
9	Input 2 Off to On Filter High Byte							
10	Input 2 On to Off Filter Low Byte							
11	Input 2 On to Off Filter High Byte							
12	Input 3 Off to On Filter Low Byte							
13	Input 3 Off to On Filter High Byte							
14	Input 3 On to Off Filter Low Byte							
15	Input 3 On to Off Filter High Byte							

Table 22 - Produced Input Data Assembly 3

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved				Ch 3	Ch 2	Ch 1	Ch 0

Eight-channel Discrete Input Modules

All eight-channel discrete input modules use the same configuration and input assemblies. Use the tables shown below for the following modules:

- 1734-IB8 or 1738-IB8
- 1734-IV8 or 1738-IV8

Table 23 - Configuration Assembly Instance 103

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Input 0 Off to On Filter Low Byte							
1	Input 0 Off to On Filter High Byte							
2	Input 0 On to Off Filter Low Byte							
3	Input 0 On to Off Filter High Byte							
4	Input 1 Off to On Filter Low Byte							
5	Input 1 Off to On Filter High Byte							
6	Input 1 On to Off Filter Low Byte							
7	Input 1 On to Off Filter High Byte							
8	Input 2 Off to On Filter Low Byte							
9	Input 2 Off to On Filter High Byte							
10	Input 2 On to Off Filter Low Byte							
11	Input 2 On to Off Filter High Byte							
12	Input 3 Off to On Filter Low Byte							
13	Input 3 Off to On Filter High Byte							
14	Input 3 On to Off Filter Low Byte							
15	Input 3 On to Off Filter High Byte							

Table 23 - Configuration Assembly Instance 103

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
16	Input 4 Off to On Filter Low Byte							
17	Input 4 Off to On Filter High Byte							
18	Input 4 On to Off Filter Low Byte							
19	Input 4 On to Off Filter High Byte							
20	Input 5 Off to On Filter Low Byte							
21	Input 5 Off to On Filter High Byte							
22	Input 5 On to Off Filter Low Byte							
23	Input 5 On to Off Filter High Byte							
24	Input 6 Off to On Filter Low Byte							
25	Input 6 Off to On Filter High Byte							
26	Input 6 On to Off Filter Low Byte							
27	Input 6 On to Off Filter High Byte							
28	Input 7 Off to On Filter Low Byte							
29	Input 7 Off to On Filter High Byte							
30	Input 7 On to Off Filter Low Byte							
31	Input 7 On to Off Filter High Byte							

Table 24 - Produced Input Data Assembly 4

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Ch 7	Ch 6	Ch 5	Ch 4	Ch 3	Ch 2	Ch 1	Ch 0

Two-channel Discrete Output Modules with Status

All two-channel “enhanced” discrete output modules use the same configuration and I/O assemblies. Use the tables shown below for the following modules:

- 1734-OB2E or 1738-OB2E
- 1734-OV2E or 1738-0V2E
- 1734-OB2EP or 1738-OB2EP

Table 25 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved						Fault State 1	Fault State 0
1	Reserved						Fault Value 1	Fault Value 0
2	Reserved						Idle State 1	Idle State 0
3	Reserved						Idle Value 1	Idle Value 0
4	Reserved						Enable No Load 1	Enable No Load 0

Table 25 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
5	Reserved						Reset mode 1	Reset mode 0
6	Reserved						Enable Latched Alarms 1	Enable Latched Alarms 0
7	Pad							

Table 26 - Produced Input Data Assembly 42

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved						Ch 1 Status	Ch 0 Status

Table 27 - Consumed Output Data Assembly 32

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved						Ch 1	Ch 0

Two-channel Discrete Output Modules

Use the tables shown below for the following modules:

- 1734-OB2 or 1738-OB2

Table 28 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved						Fault State 1	Fault State 0
1	Reserved						Fault Value 1	Fault Value 0
2	Reserved						Idle State 1	Idle State 0
3	Reserved						Idle Value 1	Idle Value 0
4	Reserved (Set to 0)							
5	Reserved (Set to 0)							
6	Reserved (Set to 0)							
7	Pad							

Table 29 - Produced Input Data Assembly 42

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved							

Table 30 - Consumed Output Data Assembly 32

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved						Ch 1	Ch 0

Four-channel Discrete Output Modules with Status

All four-channel "enhanced" discrete output modules use the same configuration and I/O assemblies. Use the tables shown below for the following modules:

- 1734-OB4E or 1738-OB4E
- 1734-OV4E or 1738-0V4E

Table 31 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved				Fault State 3	Fault State 2	Fault State 1	Fault State 0
1	Reserved				Fault Value 3	Fault Value 2	Fault Value 1	Fault Value 0
2	Reserved				Idle State 3	Idle State 2	Idle State 1	Idle State 0
3	Reserved				Idle Value 3	Idle Value 2	Idle Value 1	Idle Value 0
4	Reserved				Enable No Load 3	Enable No Load 2	Enable No Load 1	Enable No Load 0
5	Reserved				Reset mode 3	Reset mode 2	Reset mode 1	Reset mode 0
6	Reserved				Enable Latched Alarms 3	Enable Latched Alarms 2	Enable Latched Alarms 1	Enable Latched Alarms 0
7	Pad							

Table 32 - Produced Input Data Assembly 43

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved							

Table 33 - Consumed Output Data Assembly 33

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved				Ch 3	Ch 2	Ch 1	Ch 0

Four-channel Discrete Output Modules

Use the tables shown below for the following modules:

- 1734-OB4 or 1738-OB4

Table 34 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved				Fault State 3	Fault State 2	Fault State 1	Fault State 0
1	Reserved				Fault Value 3	Fault Value 2	Fault Value 1	Fault Value 0
2	Reserved				Idle State 3	Idle State 2	Idle State 1	Idle State 0
3	Reserved				Idle Value 3	Idle Value 2	Idle Value 1	Idle Value 0
4	Reserved (Set to 0)							

Table 34 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
5	Reserved (Set to 0)							
6	Reserved (Set to 0)							
7	Pad							

Table 35 - Produced Input Data Assembly 43

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved							

Table 36 - Consumed Output Data Assembly 33

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved				Ch 3	Ch 2	Ch 1	Ch 0

Eight-channel Discrete Output Modules with Status

All eight-channel "enhanced" discrete output modules use the same configuration and I/O assemblies. Use the tables shown below for the following modules:

- 1734-OB8E or 1738-OB8E
- 1734-OV8E or 1738-OV8E

Table 37 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Fault State 7	Fault State 6	Fault State 5	Fault State 4	Fault State 3	Fault State 2	Fault State 1	Fault State 0
1	Fault Value 7	Fault Value 6	Fault Value 5	Fault Value 4	Fault Value 3	Fault Value 2	Fault Value 1	Fault Value 0
2	Idle State 7	Idle State 6	Idle State 5	Idle State 4	Idle State 3	Idle State 2	Idle State 1	Idle State 0
3	Idle Value 7	Idle Value 6	Idle Value 5	Idle Value 4	Idle Value 3	Idle Value 2	Idle Value 1	Idle Value 0
4	Enable No Load 7	Enable No Load 6	Enable No Load 5	Enable No Load 4	Enable No Load 3	Enable No Load 2	Enable No Load 1	Enable No Load 0
5	Reset Mode 7	Reset Mode 6	Reset Mode 5	Reset Mode 4	Reset Mode 3	Reset Mode 2	Reset mode 1	Reset mode 0
6	Enable Latched Alarms 7	Enable Latched Alarms 6	Enable Latched Alarms 5	Enable Latched Alarms 4	Enable Latched Alarms 3	Enable Latched Alarms 2	Enable Latched Alarms 1	Enable Latched Alarms 0
7	Pad							

Table 38 - Produced Input Data Assembly 44

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Ch 7 status	Ch 6 status	Ch 5 status	Ch status	Ch 3 status	Ch 2 status	Ch 1 status	Ch 0 status

Table 39 - Consumed Output Data Assembly 34

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Ch 7	Ch 6	Ch 5	Ch 4	Ch 3	Ch 2	Ch 1	Ch 0

Eight-channel Discrete Output Modules

Use the tables shown below for the following modules:

- 1734-OB8 or 1738-OB8

Table 40 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Fault State 7	Fault State 6	Fault State 5	Fault State 4	Fault State 3	Fault State 2	Fault State 1	Fault State 0
1	Fault Value 7	Fault Value 6	Fault Value 5	Fault Value 4	Fault Value 3	Fault Value 2	Fault Value 1	Fault Value 0
2	Idle State 7	Idle State 6	Idle State 5	Idle State 4	Idle State 3	Idle State 2	Idle State 1	Idle State 0
3	Idle Value 7	Idle Value 6	Idle Value 5	Idle Value 4	Idle Value 3	Idle Value 2	Idle Value 1	Idle Value 0
4	Reserved (Set to 0)							
5	Reserved (Set to 0)							
6	Reserved (Set to 0)							
7	Pad							

Table 41 - Produced Input Data Assembly 44

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved							

Table 42 - Consumed Output Data Assembly 34

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Ch 7	Ch 6	Ch 5	Ch 4	Ch 3	Ch 2	Ch 1	Ch 0

Four-channel Discrete Diagnostic Input Modules

Use the tables shown below for the following modules:

- 1734-IB4D or 1738-IB4DM12

Table 43 - Configuration Assembly Instance 103

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Input 0 Off to On Filter Low Byte							
1	Input 0 Off to On Filter High Byte							
2	Input 0 On to Off Filter Low Byte							
3	Input 0 On to Off Filter High Byte							
4	Input 1 Off to On Filter Low Byte							
5	Input 1 Off to On Filter High Byte							
6	Input 1 On to Off Filter Low Byte							
7	Input 1 On to Off Filter High Byte							

Table 43 - Configuration Assembly Instance 103

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
8	Input 2 Off to On Filter Low Byte							
9	Input 2 Off to On Filter High Byte							
10	Input 2 On to Off Filter Low Byte							
11	Input 2 On to Off Filter High Byte							
12	Input 3 Off to On Filter Low Byte							
13	Input 3 Off to On Filter High Byte							
14	Input 3 On to Off Filter Low Byte							
15	Input 3 On to Off Filter High Byte							
16	Autobaud Disable				Enable Open Wire Detect 3	Enable Open Wire Detect 2	Enable Open Wire Detect 1	Enable Open Wire Detect 0
17	Produced Assembly Instance							

This POINT I/O input module produces 1 or 2 bytes of input data based on which produced assembly is selected. The default assembly (instance 101) is 2 bytes. This module does not consume I/O data.

Table 44 - Produced Diagnostic Input Data Assembly 101

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Fault 3	Fault 2	Fault 1	Fault 0	Input 3	Input 2	Input 1	Input 0
1	Short Circuit 3	Short Circuit 2	Short Circuit 1	Short Circuit 0	Off Wire 3	Off Wire 2	Off Wire 1	Off Wire 0

Table 45 - Produced Input Data Assembly 23

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Fault 3	Fault 2	Fault 1	Fault 0	Input 3	Input 2	Input 1	Input 0

Two-channel Relay and AC Output Modules

All two-channel relay and AC output modules use the same Consumed I/O assembly. There are no Produced or Configuration assemblies for these modules. Use the table shown below for the following modules:

- 1734-OW2
- 1734-OX2
- 1734-OA2 or 1738-OA2M12AC3

Table 46 - Consumed Output Data Assembly 32

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved						Ch 1	Ch 0

Four-channel Relay and AC Output Modules

All four channel relay and AC output modules use the same Consumed I/O assembly. There are no Produced or Configuration assemblies for these modules. Use the table shown below for the following modules:

- 1734-OW4
- 1738-OW4M12 or 1738-OW4M12AC
- 1734-OA4

Table 47 - Consumed Output Data Assembly 32

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved				Ch 3	Ch 2	Ch 1	Ch 0

Sixteen-channel Discrete Diagnostic Input Modules

Use the table shown below for the following modules:

- 1738-IB16DM12

Table 48 - Configuration Assembly Instance 103

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Input Off to On Filter Low Byte							
1	Input Off to On Filter High Byte							
2	Input On to Off Filter Low Byte							
3	Input On to Off Filter High Byte							
4	Produced Assembly							
5	Reserved = 0							

This POINT I/O input module produces 2 or 3 bytes of input data based on which produced assembly is selected. The default assembly instance 101 is 3 bytes. This module does not consume I/O data.

Table 49 - Produced Diagnostic Data Assembly Instance 101

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Ch 7	Ch 6	Ch 5	Ch 4	Ch 3	Ch 2	Ch 1	Ch 0
1	Ch 15	Ch 14	Ch 13	Ch 12	Ch 11	Ch 10	Ch 9	Ch 8
2	Reserved			Fault LED State	SSV Fault 12…15	SSV Fault 8…11	SSV Fault 4…7	SSV Fault 0…3

Table 50 - Produced Input Data Assembly Instance 5

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Ch 7	Ch 6	Ch 5	Ch 4	Ch 3	Ch 2	Ch 1	Ch 0
1	Ch 15	Ch 14	Ch 13	Ch 12	Ch 11	Ch 10	Ch 9	Ch 8

Sixteen-channel Discrete Output Modules

Use the table shown below for the following modules:

- 1738-OB16E19M23
- 1738-OB16E25DS
- 1738-OB16EM12

Table 51 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0				Enable Latched Faults	Idle Value	Idle Action	Fault Value	Fault Action
1	Reserved = 0							

Table 52 - Produced Diagnostic Data Assembly 101

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved			Fault LED State	Fault 12…15	Fault 8…11	Fault 4…7	Fault 0…3

Table 53 - Consumed Output Data Assembly 37

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Ch 7	Ch 6	Ch 5	Ch 4	Ch 3	Ch 2	Ch 1	Ch 0
1	Ch 15	Ch 14	Ch 13	Ch 12	Ch 11	Ch 10	Ch 9	Ch 8

Eight-channel Configurable Discrete Input/Output Modules

All eight channel "configurable" discrete I/O modules use the same configuration and I/O assemblies. Use the tables shown below for the following modules:

- 1734-8CFG
- 1738-8CFGM12
- 1738-8CFGM23
- 1738-8CFGM8

Table 54 - Configuration Assembly Instance 103

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Input Off to On Filter Low Byte							
1	Input Off to On Filter High Byte							
2	Input On to Off Filter Low Byte							
3	Input On to Off Filter High Byte							
4	Fault Action 7	Fault Action 6	Fault Action 5	Fault Action 4	Fault Action 3	Fault Action 2	Fault Action 1	Fault Action 0
5	Fault Value 7	Fault Value 6	Fault Value 5	Fault Value 4	Fault Value 3	Fault Value 2	Fault Value 1	Fault Value 0
6	Idle Action 7	Idle Action 6	Idle Action 5	Idle Action 4	Idle Action 3	Idle Action 2	Idle Action 1	Idle Action 0
7	Idle Value 7	Idle Value 6	Idle Value 5	Idle Value 4	Idle Value 3	Idle Value 2	Idle Value 1	Idle Value 0

Table 55 - Produced Input Data Assembly 4

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Ch 7	Ch 6	Ch 5	Ch 4	Ch 3	Ch 2	Ch 1	Ch 0

Table 56 - Consumed Output Data Assembly 34

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Ch 7	Ch 6	Ch 5	Ch 4	Ch 3	Ch 2	Ch 1	Ch 0

Very High Speed Counter Modules

Use the tables shown below for the following modules:

- 1734-VHSC5
- 1734-VHSC24 or 1738-VHSC24M23

The modules support 3 different consumed output data assemblies. The Active Output Assembly field of the Configuration assembly selects which output assembly will be used. Assembly 105 is the default. Other produced assemblies are possible but require separate configuration of the module. For more information regarding the specific fields of these assemblies, consult the product's user manual.

Table 57 - Produced Input Data Assembly 102

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Stored Channel Data [Low Byte]							
1	Stored Channel Data [1]							
2	Stored Channel Data [2]							
3	Stored Channel Data [High Byte]							
4	Status (Low Byte)							
5	Status (High Byte)							

Table 58 - Consumed Output Data Assembly 105

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Counter Control							
1	Output Control							

Table 59 - Consumed Output Data Assembly 106

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	PWM Value (Low Byte)							
1	PWM Value (High Byte)							

Table 60 - Consumed Output Data Assembly 107

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	PWM Value (Low Byte)							
1	PWM Value (High Byte)							
2	Counter Control							
3	Output Control							

Table 61 - Configuration Assembly Instance 108

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Counter Configuration							
1	Filter Selection							
2	Decimal Position							
3	Active Output Assembly							
4	Time Base or PWM Period (low byte)							
5	Time Base or PWM Period (high byte)							
6	Gate Interval							
7	Scalar							
8	Output 0 Ties							
9	Output 1 Ties							
10	Rollover Value [Low Byte]							
11	Rollover Value [1]							
12	Rollover Value [2]							
13	Rollover Value [High Byte]							
14	Preset Value [Low Byte]							
15	Preset Value [1]							
16	Preset Value [2]							
17	Preset Value [High Byte]							
18	ON Value # 1 [Low Byte]							
19	ON Value # 1 [1]							
20	ON Value # 1 [2]							
21	ON Value # 1 [High Byte]							
22	OFF Value #1 [Low Byte]							

Table 61 - Configuration Assembly Instance 108

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
23	OFF Value #1 [1]							
24	OFF Value #1 [2]							
25	OFF Value #1 [High Byte]							
26	ON Value # 2 [Low Byte]							
27	ON Value # 2 [1]							
28	ON Value # 2 [2]							
29	ON Value # 2 [High Byte]							
30	OFF Value #2 [Low Byte]							
31	OFF Value #2 [1]							
32	OFF Value #2 [2]							
33	OFF Value #2 [High Byte]							
34	ON Value # 3 [Low Byte]							
35	ON Value # 3 [1]							
36	ON Value # 3 [2]							
37	ON Value # 3 [High Byte]							
38	OFF Value #3 [Low Byte]							
39	OFF Value #3 [1]							
40	OFF Value #3 [2]							
41	OFF Value #3 [High Byte]							
42	ON Value # 4 [Low Byte]							
43	ON Value # 4 [1]							
44	ON Value # 4 [2]							
45	ON Value # 4 [High Byte]							
46	OFF Value #4 [Low Byte]							
47	OFF Value #4 [1]							
48	OFF Value #4 [2]							
49	OFF Value #4 [High Byte]							
50	PWM Safe State Value (low byte)							
51	PWM Safe State Value (high byte)							
52	Counter Control SSV							
53	Output Control SSV							

Counter Modules

Use the tables shown below for the following modules:

- 1734-IJ or 1738-IJM23
- 1734-IK

The modules support 3 different consumed input data assemblies. The produced input assembly can be set with the Requested Change of State Produce Assembly filed of the Configuration assembly. Assembly 102 is the default produced assembly. For more information regarding the specific fields of these assemblies, consult the product's user manual.

Table 62 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Counter Configuration							
1	Filter Selection							
2	Decimal Position							
3	Reserved							
4	Time Base (low byte)							
5	Time Base (high byte)							
6	Gate Interval							
7	Scalar							
8	Rollover Value [Low Byte]							
9	Rollover Value [1]							
10	Rollover Value [2]							
11	Rollover Value [High Byte]							
12	Preset Value [Low Byte]							
13	Preset Value [1]							
14	Preset Value [2]							
15	Preset Value [High Byte]							
16	Counter Control SSV							
17	Reserved (set to 0)							

Table 63 - Produced Input Data Assembly 102

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Stored Channel Data [Low Byte]							
1	Stored Channel Data [1]							
2	Stored Channel Data [2]							
3	Stored Channel Data [High Byte]							
4	Status (Low Byte)							
5	Status (High Byte)							

Table 64 - Consumed Output Data Assembly 105

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Counter Control							

Two-channel Analog Input Modules

Use the tables shown below for the following modules:

- 1734-IE2C
- 1734-IE2V
- 1738-IE2CM12 or 1738-IE2VM12

Table 65 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Low Engineering Channel 0 (Low Byte)							
1	Low Engineering Channel 0 (High Byte)							
2	High Engineering Channel 0 (Low Byte)							
3	High Engineering Channel 0 (High Byte)							
4	Digital Filter Channel 0 (Low Byte)							
5	Digital Filter Channel 0 (High Byte)							
6	Low Alarm Channel 0 (Low Byte)							
7	Low Alarm Channel 0 (High Byte)							
8	High Alarm Channel 0 (Low Byte)							
9	High Alarm Channel 0 (High Byte)							
10	Low Low Alarm Channel 0 (Low Byte)							
11	Low Low Alarm Channel 0 (High Byte)							
12	High High Alarm Channel 0 (Low Byte)							
13	High High Alarm Channel 0 (High Byte)							
14	Range Channel 0							
15	Alarm Latch Channel 0							
16	Alarm Disable Channel 0							
17	Alignment (reserved = 0)							
18	Low Engineering Channel 1 (Low Byte)							
19	Low Engineering Channel 1 (High Byte)							
20	High Engineering Channel 1 (Low Byte)							
21	High Engineering Channel 1 (High Byte)							
22	Digital Filter Channel 1 (Low Byte)							
23	Digital Filter Channel 1 (High Byte)							
24	Low Alarm Channel 1 (Low Byte)							
25	Low Alarm Channel 1 (High Byte)							
26	High Alarm Channel 1 (Low Byte)							
27	High Alarm Channel 1 (High Byte)							
28	Low Low Alarm Channel 1 (Low Byte)							
29	Low Low Alarm Channel 1 (High Byte)							
30	High High Alarm Channel 1 (Low Byte)							

Table 65 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
31	High High Alarm Channel 1 (High Byte)							
32	Range Channel 1							
33	Alarm Latch Channel 1							
34	Alarm Disable Channel 1							
35	Notch Filter							
36	Update Rate (Low Byte)							
37	Update Rate (High Byte)							

Table 66 - Produced Input Data Assembly 101

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Channel 0 Data (Low Byte)							
1	Channel 0 Data (High Byte)							
2	Channel 1 Data (Low Byte)							
3	Channel 1 Data (High Byte)							
4	Channel 0 Status							
5	Channel 1 Status							

Four-channel Analog Input Modules

Use the tables shown below for the following modules:

- 1734-IE4C
- 1738-IE4CM12 or 1738-IE4VM12

Table 67 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Low Engineering Channel 0 (Low Byte)							
1	Low Engineering Channel 0 (High Byte)							
2	High Engineering Channel 0 (Low Byte)							
3	High Engineering Channel 0 (High Byte)							
4	Digital Filter Channel 0 (Low Byte)							
5	Digital Filter Channel 0 (High Byte)							
6	Low Alarm Channel 0 (Low Byte)							
7	Low Alarm Channel 0 (High Byte)							
8	High Alarm Channel 0 (Low Byte)							
9	High Alarm Channel 0 (High Byte)							
10	Low Low Alarm Channel 0 (Low Byte)							
11	Low Low Alarm Channel 0 (High Byte)							
12	High High Alarm Channel 0 (Low Byte)							

Table 67 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
13	High High Alarm Channel 0 (High Byte)							
14	Range Channel 0							
15	Alarm Latch Channel 0							
16	Alarm Disable Channel 0							
17	Alignment (reserved = 0)							
18	Low Engineering Channel 1 (Low Byte)							
19	Low Engineering Channel 1 (High Byte)							
20	High Engineering Channel 1 (Low Byte)							
21	High Engineering Channel 1 (High Byte)							
22	Digital Filter Channel 1 (Low Byte)							
23	Digital Filter Channel 1 (High Byte)							
24	Low Alarm Channel 1 (Low Byte)							
25	Low Alarm Channel 1 (High Byte)							
26	High Alarm Channel 1 (Low Byte)							
27	High Alarm Channel 1 (High Byte)							
28	Low Low Alarm Channel 1 (Low Byte)							
29	Low Low Alarm Channel 1 (High Byte)							
30	High High Alarm Channel 1 (Low Byte)							
31	High High Alarm Channel 1 (High Byte)							
32	Range Channel 1							
33	Alarm Latch Channel 1							
34	Alarm Disable Channel 1							
35	Alignment (reserved = 0)							
36	Low Engineering Channel 2 (Low Byte)							
37	Low Engineering Channel 2 (High Byte)							
38	High Engineering Channel 2 (Low Byte)							
39	High Engineering Channel 2 (High Byte)							
40	Digital Filter Channel 2 (Low Byte)							
41	Digital Filter Channel 2 (High Byte)							
42	Low Alarm Channel 2 (Low Byte)							
43	Low Alarm Channel 2 (High Byte)							
44	High Alarm Channel 2 (Low Byte)							
45	High Alarm Channel 2 (High Byte)							
46	Low Low Alarm Channel 2 (Low Byte)							
47	Low Low Alarm Channel 2 (High Byte)							
48	High High Alarm Channel 2 (Low Byte)							
49	High High Alarm Channel 2 (High Byte)							
50	Range Channel 2							
51	Alarm Latch Channel 2							

Table 67 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
52	Alarm Disable Channel 2							
53	Alignment (reserved = 0)							
54	Low Engineering Channel 3 (Low Byte)							
55	Low Engineering Channel 3 (High Byte)							
56	High Engineering Channel 3 (Low Byte)							
57	High Engineering Channel 3 (High Byte)							
58	Digital Filter Channel 3 (Low Byte)							
59	Digital Filter Channel 3 (High Byte)							
60	Low Alarm Channel 3 (Low Byte)							
61	Low Alarm Channel 3 (High Byte)							
62	High Alarm Channel 3 (Low Byte)							
63	High Alarm Channel 3 (High Byte)							
64	Low Low Alarm Channel 3 (Low Byte)							
65	Low Low Alarm Channel 3 (High Byte)							
66	High High Alarm Channel 3 (Low Byte)							
67	High High Alarm Channel 3 (High Byte)							
68	Range Channel 3							
69	Alarm Latch Channel 3							
70	Alarm Disable Channel 3							
71	Notch Filter							
72	Update Rate (Low Byte)							
73	Update Rate (High Byte)							

Table 68 - Produced Input Data Assembly 101

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Channel 0 Data (Low Byte)							
1	Channel 0 Data (High Byte)							
2	Channel 1 Data (Low Byte)							
3	Channel 1 Data (High Byte)							
4	Channel 2 Data (Low Byte)							
5	Channel 2 Data (High Byte)							
6	Channel 3 Data (Low Byte)							
7	Channel 3 Data (High Byte)							
8	Channel 0 Status							
9	Channel 1 Status							
10	Channel 2 Status							
11	Channel 3 Status							

Eight-channel Analog Input Modules

Use the tables shown below for the following modules:

- 1734-IE8C
- 1734-IE8V

Table 69 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Low Engineering Channel 0 (Low Byte)							
1	Low Engineering Channel 0 (High Byte)							
2	High Engineering Channel 0 (Low Byte)							
3	High Engineering Channel 0 (High Byte)							
4	Digital Filter Channel 0 (Low Byte)							
5	Digital Filter Channel 0 (High Byte)							
6	Low Alarm Channel 0 (Low Byte)							
7	Low Alarm Channel 0 (High Byte)							
8	High Alarm Channel 0 (Low Byte)							
9	High Alarm Channel 0 (High Byte)							
10	Low Low Alarm Channel 0 (Low Byte)							
11	Low Low Alarm Channel 0 (High Byte)							
12	High High Alarm Channel 0 (Low Byte)							
13	High High Alarm Channel 0 (High Byte)							
14	Range Channel 0							
15	Alarm Latch Channel 0							
16	Alarm Disable Channel 0							
17	Alignment (reserved = 0)							
18	Low Engineering Channel 1 (Low Byte)							
19	Low Engineering Channel 1 (High Byte)							
20	High Engineering Channel 1 (Low Byte)							
21	High Engineering Channel 1 (High Byte)							
22	Digital Filter Channel 1 (Low Byte)							
23	Digital Filter Channel 1 (High Byte)							
24	Low Alarm Channel 1 (Low Byte)							
25	Low Alarm Channel 1 (High Byte)							
26	High Alarm Channel 1 (Low Byte)							
27	High Alarm Channel 1 (High Byte)							
28	Low Low Alarm Channel 1 (Low Byte)							
29	Low Low Alarm Channel 1 (High Byte)							
30	High High Alarm Channel 1 (Low Byte)							
31	High High Alarm Channel 1 (High Byte)							

Table 69 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
32	Range Channel 1							
33	Alarm Latch Channel 1							
34	Alarm Disable Channel 1							
35	Alignment (reserved = 0)							
36	Low Engineering Channel 2 (Low Byte)							
37	Low Engineering Channel 2 (High Byte)							
38	High Engineering Channel 2 (Low Byte)							
39	High Engineering Channel 2 (High Byte)							
40	Digital Filter Channel 2 (Low Byte)							
41	Digital Filter Channel 2 (High Byte)							
42	Low Alarm Channel 2 (Low Byte)							
43	Low Alarm Channel 2 (High Byte)							
44	High Alarm Channel 2 (Low Byte)							
45	High Alarm Channel 2 (High Byte)							
46	Low Low Alarm Channel 2 (Low Byte)							
47	Low Low Alarm Channel 2 (High Byte)							
48	High High Alarm Channel 2 (Low Byte)							
49	High High Alarm Channel 2 (High Byte)							
50	Range Channel 2							
51	Alarm Latch Channel 2							
52	Alarm Disable Channel 2							
53	Alignment (reserved = 0)							
54	Low Engineering Channel 3 (Low Byte)							
55	Low Engineering Channel 3 (High Byte)							
56	High Engineering Channel 3 (Low Byte)							
57	High Engineering Channel 3 (High Byte)							
58	Digital Filter Channel 3 (Low Byte)							
59	Digital Filter Channel 3 (High Byte)							
60	Low Alarm Channel 3 (Low Byte)							
61	Low Alarm Channel 3 (High Byte)							
62	High Alarm Channel 3 (Low Byte)							
63	High Alarm Channel 3 (High Byte)							
64	Low Low Alarm Channel 3 (Low Byte)							
65	Low Low Alarm Channel 3 (High Byte)							
66	High High Alarm Channel 3 (Low Byte)							
67	High High Alarm Channel 3 (High Byte)							
68	Range Channel 3							
69	Alarm Latch Channel 3							
70	Alarm Disable Channel 3							

Table 69 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
71	Alignment (reserved = 0)							
72	Low Engineering Channel 4 (Low Byte)							
73	Low Engineering Channel 4 (High Byte)							
74	High Engineering Channel 4 (Low Byte)							
75	High Engineering Channel 4 (High Byte)							
76	Digital Filter Channel 4 (Low Byte)							
77	Digital Filter Channel 4 (High Byte)							
78	Low Alarm Channel 4 (Low Byte)							
79	Low Alarm Channel 4 (High Byte)							
80	High Alarm Channel 4 (Low Byte)							
81	High Alarm Channel 4 (High Byte)							
82	Low Low Alarm Channel 4 (Low Byte)							
83	Low Low Alarm Channel 4 (High Byte)							
84	High High Alarm Channel 4 (Low Byte)							
85	High High Alarm Channel 4 (High Byte)							
86	Range Channel 4							
87	Alarm Latch Channel 4							
88	Alarm Disable Channel 4							
89	Alignment (reserved = 0)							
90	Low Engineering Channel 5 (Low Byte)							
91	Low Engineering Channel 5 (High Byte)							
92	High Engineering Channel 5 (Low Byte)							
93	High Engineering Channel 5 (High Byte)							
94	Digital Filter Channel 5 (Low Byte)							
95	Digital Filter Channel 5 (High Byte)							
96	Low Alarm Channel 5 (Low Byte)							
97	Low Alarm Channel 5 (High Byte)							
98	High Alarm Channel 5 (Low Byte)							
99	High Alarm Channel 5 (High Byte)							
100	Low Low Alarm Channel 5 (Low Byte)							
101	Low Low Alarm Channel 5 (High Byte)							
102	High High Alarm Channel 5 (Low Byte)							
103	High High Alarm Channel 5 (High Byte)							
104	Range Channel 5							
105	Alarm Latch Channel 5							
106	Alarm Disable Channel 5							
107	Alignment (reserved = 0)							
108	Low Engineering Channel 6 (Low Byte)							
109	Low Engineering Channel 6 (High Byte)							

Table 69 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
110	High Engineering Channel 6 (Low Byte)							
111	High Engineering Channel 6 (High Byte)							
112	Digital Filter Channel 6 (Low Byte)							
113	Digital Filter Channel 6 (High Byte)							
114	Low Alarm Channel 6 (Low Byte)							
115	Low Alarm Channel 6 (High Byte)							
116	High Alarm Channel 6 (Low Byte)							
117	High Alarm Channel 6 (High Byte)							
118	Low Low Alarm Channel 6 (Low Byte)							
119	Low Low Alarm Channel 6 (High Byte)							
120	High High Alarm Channel 6 (Low Byte)							
121	High High Alarm Channel 6 (High Byte)							
122	Range Channel 6							
123	Alarm Latch Channel 6							
124	Alarm Disable Channel 6							
125	Alignment (reserved = 0)							
126	Low Engineering Channel 7 (Low Byte)							
127	Low Engineering Channel 7 (High Byte)							
128	High Engineering Channel 7 (Low Byte)							
129	High Engineering Channel 7 (High Byte)							
130	Digital Filter Channel 7 (Low Byte)							
131	Digital Filter Channel 7 (High Byte)							
132	Low Alarm Channel 7 (Low Byte)							
133	Low Alarm Channel 7 (High Byte)							
134	High Alarm Channel 7 (Low Byte)							
135	High Alarm Channel 7 (High Byte)							
136	Low Low Alarm Channel 7 (Low Byte)							
137	Low Low Alarm Channel 7 (High Byte)							
138	High High Alarm Channel 7 (Low Byte)							
139	High High Alarm Channel 7 (High Byte)							
140	Range Channel 7							
141	Alarm Latch Channel 7							
142	Alarm Disable Channel 7							
143	Notch Filter							
144	Update Rate (Low Byte)							
145	Update Rate (High Byte)							

Table 70 - Produced Input Data Assembly 101

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Channel 0 Data (Low Byte)							
1	Channel 0 Data (High Byte)							
2	Channel 1 Data (Low Byte)							
3	Channel 1 Data (High Byte)							
4	Channel 2 Data (Low Byte)							
5	Channel 2 Data (High Byte)							
6	Channel 3 Data (Low Byte)							
7	Channel 3 Data (High Byte)							
8	Channel 4 Data (Low Byte)							
9	Channel 4 Data (High Byte)							
10	Channel 5 Data (Low Byte)							
11	Channel 5 Data (High Byte)							
12	Channel 6 Data (Low Byte)							
13	Channel 6 Data (High Byte)							
14	Channel 7 Data (Low Byte)							
15	Channel 7 Data (High Byte)							
16	Channel 0 Status							
17	Channel 1 Status							
18	Channel 2 Status							
19	Channel 3 Status							
20	Channel 4 Status							
21	Channel 5 Status							
22	Channel 6 Status							
23	Channel 7 Status							

Two-channel Analog Output Modules

Use the tables shown below for the following modules:

- 1734-OE2C
- 1734-OE2V
- 1738-OE2CM12 or 1738-OE2VM12

Table 71 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Fault Data Channel 0 (Low Byte)							
1	Fault Data Channel 0 (High Byte)							
2	Idle Data Channel 0 (Low Byte)							

Table 71 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
3	Idle Data Channel 0 (High Byte)							
4	Low Engineering Channel 0 (Low Byte)							
5	Low Engineering Channel 0 (High Byte)							
6	High Engineering Channel 0 (Low Byte)							
7	High Engineering Channel 0 (High Byte)							
8	Low Clamp Channel 0 (Low Byte)							
9	Low Clamp Channel 0 (High Byte)							
10	High Clamp Channel 0 (Low Byte)							
11	High Clamp Channel 0 (High Byte)							
12	Range Channel 0							
13	Fault Action Channel 0							
14	Idle Action Channel 0							
15	Alarm Latch Channel 0							
16	Alarm Disable Channel 0							
17	Alignment (reserved = 0)							
18	Fault Data Channel 1 (Low Byte)							
19	Fault Data Channel 1 (High Byte)							
20	Idle Data Channel 1 (Low Byte)							
21	Idle Data Channel 1 (High Byte)							
22	Low Engineering Channel 1 (Low Byte)							
23	Low Engineering Channel 1 (High Byte)							
24	High Engineering Channel 1 (Low Byte)							
25	High Engineering Channel 1 (High Byte)							
26	Low Clamp Channel 1 (Low Byte)							
27	Low Clamp Channel 1 (High Byte)							
28	High Clamp Channel 1 (Low Byte)							
29	High Clamp Channel 1 (High Byte)							
30	Range Channel 1							
31	Fault Action Channel 1							
32	Idle Action Channel 1							
33	Alarm Latch Channel 1							
34	Alarm Disable Channel 1							
35	Alignment (reserved = 0)							

Table 72 - Produced Input Data Assembly 101

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Channel 0 Status							
1	Channel 1 Status							

Table 73 - Consumed Output Data Assembly 102

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Channel 0 Data (Low Byte)							
1	Channel 0 Data (High Byte)							
2	Channel 1 Data (Low Byte)							
3	Channel 1 Data (High Byte)							

Four-channel Analog Output Modules

Use the tables shown below for the following modules:

- 1734-OE4C
- 1738-OE4CM12 or 1738-OE4VM12

Table 74 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Fault Data Channel 0 (Low Byte)							
1	Fault Data Channel 0 (High Byte)							
2	Idle Data Channel 0 (Low Byte)							
3	Idle Data Channel 0 (High Byte)							
4	Low Engineering Channel 0 (Low Byte)							
5	Low Engineering Channel 0 (High Byte)							
6	High Engineering Channel 0 (Low Byte)							
7	High Engineering Channel 0 (High Byte)							
8	Low Clamp Channel 0 (Low Byte)							
9	Low Clamp Channel 0 (High Byte)							
10	High Clamp Channel 0 (Low Byte)							
11	High Clamp Channel 0 (High Byte)							
12	Range Channel 0							
13	Fault Action Channel 0							
14	Idle Action Channel 0							
15	Alarm Latch Channel 0							
16	Alarm Disable Channel 0							
17	Alignment (reserved = 0)							
18	Fault Data Channel 1 (Low Byte)							
19	Fault Data Channel 1 (High Byte)							
20	Idle Data Channel 1 (Low Byte)							
21	Idle Data Channel 1 (High Byte)							
22	Low Engineering Channel 1 (Low Byte)							
23	Low Engineering Channel 1 (High Byte)							

Table 74 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
24	High Engineering Channel 1 (Low Byte)							
25	High Engineering Channel 1 (High Byte)							
26	Low Clamp Channel 1 (Low Byte)							
27	Low Clamp Channel 1 (High Byte)							
28	High Clamp Channel 1 (Low Byte)							
29	High Clamp Channel 1 (High Byte)							
30	Range Channel 1							
31	Fault Action Channel 1							
32	Idle Action Channel 1							
33	Alarm Latch Channel 1							
34	Alarm Disable Channel 1							
35	Alignment (reserved = 0)							
36	Fault Data Channel 2 (Low Byte)							
37	Fault Data Channel 2 (High Byte)							
38	Idle Data Channel 2 (Low Byte)							
39	Idle Data Channel 2 (High Byte)							
40	Low Engineering Channel 2 (Low Byte)							
41	Low Engineering Channel 2 (High Byte)							
42	High Engineering Channel 2 (Low Byte)							
43	High Engineering Channel 2 (High Byte)							
44	Low Clamp Channel 2 (Low Byte)							
45	Low Clamp Channel 2 (High Byte)							
46	High Clamp Channel 2 (Low Byte)							
47	High Clamp Channel 2 (High Byte)							
48	Range Channel 2							
49	Fault Action Channel 2							
50	Idle Action Channel 2							
51	Alarm Latch Channel 2							
52	Alarm Disable Channel 2							
53	Alignment (reserved = 0)							
54	Fault Data Channel 3 (Low Byte)							
55	Fault Data Channel 3 (High Byte)							
56	Idle Data Channel 3 (Low Byte)							
57	Idle Data Channel 3 (High Byte)							
58	Low Engineering Channel 3 (Low Byte)							
59	Low Engineering Channel 3 (High Byte)							
60	High Engineering Channel 3 (Low Byte)							
61	High Engineering Channel 3 (High Byte)							
62	Low Clamp Channel 3 (Low Byte)							

Table 74 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
63	Low Clamp Channel 3 (High Byte)							
64	High Clamp Channel 3 (Low Byte)							
65	High Clamp Channel 3 (High Byte)							
66	Range Channel 3							
67	Fault Action Channel 3							
68	Idle Action Channel 3							
69	Alarm Latch Channel 3							
70	Alarm Disable Channel 3							
71	Alignment (reserved = 0)							

Table 75 - Produced Input Data Assembly 101

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Channel 0 Status							
1	Channel 1 Status							
2	Channel 2 Status							
3	Channel 3 Status							

Table 76 - Consumed Output Data Assembly 102

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Channel 0 Data (Low Byte)							
1	Channel 0 Data (High Byte)							
2	Channel 1 Data (Low Byte)							
3	Channel 1 Data (High Byte)							
4	Channel 2 Data (Low Byte)							
5	Channel 2 Data (High Byte)							
6	Channel 3 Data (Low Byte)							
7	Channel 3 Data (High Byte)							

Two-channel RTD Input Modules

Use the tables shown below for the following modules:

- 1734-IR2
- 1734-IR2E or 1738-IR2M12

Table 77 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Low Engineering Channel 0 (Low Byte)							
1	Low Engineering Channel 0 (High Byte)							
2	High Engineering Channel 0 (Low Byte)							
3	High Engineering Channel 0 (High Byte)							
4	Digital Filter Channel 0 (Low Byte)							
5	Digital Filter Channel 0 (High Byte)							
6	Low Alarm Channel 0 (Low Byte)							
7	Low Alarm Channel 0 (High Byte)							
8	High Alarm Channel 0 (Low Byte)							
9	High Alarm Channel 0 (High Byte)							
10	Low Low Alarm Channel 0 (Low Byte)							
11	Low Low Alarm Channel 0 (High Byte)							
12	High High Alarm Channel 0 (Low Byte)							
13	High High Alarm Channel 0 (High Byte)							
14	Alarm Latch Channel 0							
15	Alarm Disable Channel 0							
16	Sensor Type Channel 0							
17	Temperature Units Channel 0							
18	Low Engineering Channel 1 (Low Byte)							
19	Low Engineering Channel 1 (High Byte)							
20	High Engineering Channel 1 (Low Byte)							
21	High Engineering Channel 1 (High Byte)							
22	Digital Filter Channel 1 (Low Byte)							
23	Digital Filter Channel 1 (High Byte)							
24	Low Alarm Channel 1 (Low Byte)							
25	Low Alarm Channel 1 (High Byte)							
26	High Alarm Channel 1 (Low Byte)							
27	High Alarm Channel 1 (High Byte)							
28	Low Low Alarm Channel 1 (Low Byte)							
29	Low Low Alarm Channel 1 (High Byte)							
30	High High Alarm Channel 1 (Low Byte)							
31	High High Alarm Channel 1 (High Byte)							
32	Alarm Latch Channel 1							
33	Alarm Disable Channel 1							
34	Sensor Type Channel 1							
35	Temperature Units Channel 1							
36	Notch Filter							
37	Alignment (reserved = 0)							

Table 78 - Produced Input Data Assembly 101

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Channel 0 Data (Low Byte)							
1	Channel 0 Data (High Byte)							
2	Channel 1 Data (Low Byte)							
3	Channel 1 Data (High Byte)							
4	Channel 0 Status							
5	Channel 1 Status							

Two-channel Thermocouple Input Modules

Use the tables shown below for the following modules:

- 1734-IT2I or 1738-IT2IM12

Table 79 - Configuration Assembly Instance 103

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Cold Junction Notch Filter							
1	Cold Junction Produced							
2	Low Engineering Channel 0 (Low Byte)							
3	Low Engineering Channel 0 (High Byte)							
4	High Engineering Channel 0 (Low Byte)							
5	High Engineering Channel 0 (High Byte)							
6	Alarm Disable Channel 0							
7	Alarm Latch Channel 0							
8	Notch Filter Channel 0							
9	Sensor Type Channel 0							
10	Digital Filter Channel 0 (Low Byte)							
11	Digital Filter Channel 0 (High Byte)							
12	Low Alarm Channel 0 (Low Byte)							
13	Low Alarm Channel 0 (High Byte)							
14	High Alarm Channel 0 (Low Byte)							
15	High Alarm Channel 0 (High Byte)							
16	Low Low Alarm Channel 0 (Low Byte)							
17	Low Low Alarm Channel 0 (High Byte)							
18	High High Alarm Channel 0 (Low Byte)							
19	High High Alarm Channel 0 (High Byte)							
20	Temperature Units Channel 0							
21	Cold Junction Enable Chan 0							
22	Cold Junction Offset Chan 0 (Low Byte)							

Table 79 - Configuration Assembly Instance 103

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
23	Cold Junction Offset Chan 0 (High Byte)							
24	Low Engineering Channel 1 (Low Byte)							
25	Low Engineering Channel 1 (High Byte)							
26	High Engineering Channel 1 (Low Byte)							
27	High Engineering Channel 1 (High Byte)							
28	Alarm Disable Channel 1							
29	Alarm Latch Channel 1							
30	Notch Filter Channel 1							
31	Sensor Type Channel 1							
32	Digital Filter Channel 1 (Low Byte)							
33	Digital Filter Channel 1 (High Byte)							
34	Low Alarm Channel 1 (Low Byte)							
35	Low Alarm Channel 1 (High Byte)							
36	High Alarm Channel 1 (Low Byte)							
37	High Alarm Channel 1 (High Byte)							
38	Low Low Alarm Channel 1 (Low Byte)							
39	Low Low Alarm Channel 1 (High Byte)							
40	High High Alarm Channel 1 (Low Byte)							
41	High High Alarm Channel 1 (High Byte)							
42	Temperature Units Channel 1							
43	Cold Junction Enable Chan 1							
44	Cold Junction Offset Chan 1 (Low Byte)							
45	Cold Junction Offset Chan 1 (High Byte)							

Table 80 - Produced Input Data Assembly 101

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Channel 0 Data (Low Byte)							
1	Channel 0 Data (High Byte)							
2	Channel 1 Data (Low Byte)							
3	Channel 1 Data (High Byte)							
4	Channel 0 Status							
5	Channel 1 Status							
6	CJC Data (Low Byte)							
7	CJC Data (High Byte)							

Synchronous Serial Interface Modules

Use the tables shown below for the following modules:

- 1734-SSI or 1738-SSIM12

Table 81 - Configuration Assembly Instance 123

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Run							
1	Gray/Binary							
2	SSI Word Length							
3	Data Rate							
4	Gray to Binary Conversion							
5	Standardization							
6	SSI Word Delay Time (Low Byte)							
7	SSI Word Delay Time (High Byte)							
8	Trailing bits							
9	Latch Input Control							
10	Sensor Resolution (Low Byte)							
11	Sensor Resolution (High Byte)							
12	Sensor Cycles (Low Byte)							
13	Sensor Cycles (High Byte)							
14	SSI Word Filter Control							
15	Alignment (reserved = 0)							
16	Comparator 1 Value [Low Byte]							
17	Comparator 1 Value [1]							
18	Comparator 1 Value [2]							
19	Comparator 1 Value [High Byte]							
20	Comparator 2 Value [Low Byte]							
21	Comparator 2 Value [1]							
22	Comparator 2 Value [2]							
23	Comparator 2 Value [High Byte]							
24	Comparator 1 Control							
25	Comparator 2 Control							

Table 82 - Produced Input Data Assembly 101

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Present SSI Word [Low Byte]							
1	Present SSI Word [1]							
2	Present SSI Word [2]							
3	Present SSI Word [High Byte]							
4	Latched SSI Word [Low Byte]							
5	Latched SSI Word [1]							
6	Latched SSI Word [2]							

Table 82 - Produced Input Data Assembly 101

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
7	Latched SSI Word [High Byte]							
8	Module Status (Low Byte)							
9	Module Status (High Byte)							

Table 83 - Consumed Output Data Assembly 102

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Master Ack Byte Output Control							
1	Reserved = 0							

Address Reserve Module

Use the table shown below for the 1734-ARM. This module has no configuration and does not consume any I/O data.

Table 84 - Produced Input Data Assembly 4

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved = 0							

ASCII Interface Modules

Use the tables shown below for the following modules:

- 1734-232ASC
- 1734-485ASC
- 1738-232ASCM12 or 1738-48ASCM12

Table 85 - Configuration Assembly Instance 103

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	ASCII Serial Character Format							
1	ASCII Serial Comm Speed							
2	ASCII Max Number of Receive Characters							
3	ASCII Receive Record Start Mode							
4	ASCII Receive Start Delimiter							
5	ASCII Receive Record End Mode							
6	ASCII Receive End Delimiter							
7	ASCII Receive String Data Type							
8	ASCII Pad Mode							

Table 85 - Configuration Assembly Instance 103

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
9	ASCII Pad Character							
10	ASCII Receive Swap Mode							
11	Handshake Mode							
12	ASCII Max Number of Transmit Characters							
13	ASCII Transmit End Delimiter Mode							
14	ASCII Transmit End Delimiter Character							
15	ASCII Consume String Data Type							
16	ASCII Transmit Swap Mode							
17	Transmit Handshake Mode							

The format and length of the Produced and Consumed I/O assemblies vary with the configuration of the module. For more information regarding the specific fields of these assemblies and how they are impacted by the configuration, refer to the product user manual.

Table 86 - Produced Input Data Assembly 101

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	RX Transaction ID							
1	Status							
2	Reserved or Length(2)							
3	Reserved or Length(2)							
4	ASCII Data (from 1 to 128 bytes)							
N(1)	<CR> Terminator							

(1) The length of the assembly depends on the amount of ASCII Data transmitted.

(2) The meaning of these fields depends on the configuration of the module.

Table 87 - Consumed Output Data Assembly 102

Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved							
1	TX Transaction ID							
2	Reserved							
3	Length							
4	ASCII Data (from 1 to 128 bytes)							
N(1)	<CR> Terminator							

(1) The length of the assembly depends on the amount of ASCII Data transmitted.

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