

# **Rockwell** **Automation**

## **POWER SYSTEMS**

**Inbound 810 X12 4010**

## DOCUMENT OVERVIEW

This document contains the requirements for the standard EDI 810 document in ANSI version 4010 as used by ROCKWELL AUTOMATION POWER SYSTEMS. It describes the layout, syntax, and semantics for Rockwell Suppliers to use to prepare and send an invoice document. ROCKWELL will acknowledge the receipt of this document by returning a 997 to our Supplier within 24 hours.

## EDI COMMUNICATIONS

ROCKWELL AUTOMATION POWER SYSTEMS prefers to use AS2 connections. If the Supplier is not AS2 capable, ROCKWELL AUTOMATION POWER SYSTEMS uses Sterling Commerce as a VAN. Sterling Commerce is capable of setting up Trading Supplier inter-connects to other VAN services as necessary.

ISA and Group Trading IDs are as follows:

### Production:

ISA level qualifier: 01  
ISA level sender Id: 144846607  
Group level sender ID: 144846607

### Test:

ISA level qualifier: ZZ  
ISA level sender Id: 144846607T  
Group level sender ID: 144846607T

### For EDI assistance or questions, please contact:

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## SAMPLE EDI 810 DATA

ISA\*00\* \*00\* \*ZZ\*TS ID \*01\*144846607 \*040219\*0600\*U\*00400\*00000001\*0\*P\*:  
GS\*IN\*TS ID\*144846607004\*20040219\*0600\*1\*X\*004010  
ST\*810\*0000001  
BIG\*20040219\*2224452\*20040128\*79259\*\*\*DI\*00  
NTE\*ZZ\*DAV  
REF\*BM\*1426485102723047  
REF\*SCA\*BEST  
N1\*BT\*ROCKWELL AUTOMATION\*ZZ\*DAV  
N3\*70 REEMS CREEK RD  
N4\*WEAVERVILLE\*NC\*28787  
N1\*ST\*COLINX LLC\*ZZ\*004  
N3\*ROCKWELL AUTOMATION\*1536 GENESIS ROAD  
N4\*CROSSVILLE\*TN\*38555  
N1\*RI\*TRADING SUPPLIER INFORMATION\*1\*999999  
N3\*99999 NETWORK PLACE  
N4\*CITY\*ST\*ZIP  
ITD\*05\*9\*9\*\*10\*\*30\*\*\*\*\*3% 10 DAYS, NET 30 DAYS  
DTM\*011\*20040218  
FOB\*CC  
IT1\*10000\*99\*EA\*99.99\*\*BP\*107159\*VP\*999999  
QTY\*63\*99  
TXI\*ZZ\*9.99\*0.9  
CTP\*\*INV\*9.9999\*\*\*DIS\*9.9999\*99.99  
PID\*F\*\*\*POW WEG COG BEL  
TDS\*9999  
SAC\*A\*\*\*9.99\*1  
ISS\*9\*PK\*9\*LB  
CTT\*1\*99  
SE\*27\*0000001  
GE\*1\*1  
IEA\*1\*000000001

# 810

## Invoice

**Functional Group=IN**

This document contains the format and establishes the data contents of the ROCKWELL AUTOMATION Invoice Transaction Set (810) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business and industry practice relative to the billing for goods and services provided.

### Segments:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
	ISA	Interchange Control Header	M	1			Used
	GS	Functional Group Header	M	1			Used

### Heading:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	ST	Transaction Set Header	M	1			Must use
020	BIG	Beginning Segment for Invoice	M	1			Must use
030	NTE	Note/Special Instruction	O	100			Used
050	REF	Reference Numbers	O	12			Used
<b>LOOP ID - N1</b>					<b>200</b>		
070	N1	Name	M	1			Used
090	N3	Address Information	M	2			Used
100	N4	Geographic Location	M	1			Used
130	ITD	Terms of Sale/Deferred Terms of Sale	O	>1			Used
140	DTM	Date/Time Reference	O	10			Used
150	FOB	F.O.B. Related Instructions	O	1			Used

### Detail:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
<b>LOOP ID - IT1</b>					<b>200000</b>		
010	IT1	Baseline Item Data (Invoice)	M	1			Used
015	QTY	Quantity	O	5		N2/015	Used
040	TXI	Tax Information	O	10			Used
050	CTP	Pricing Information	M	25			Used
<b>LOOP ID - PID</b>					<b>1000</b>		
060	PID	Product/Item Description	O	1			Used

### Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	TDS	Total Monetary Value Summary	M	1			Must use
<b>LOOP ID - SAC</b>					<b>25</b>		

040	SAC	Service, Promotion, Allowance, or Charge Information	O	1			Used
<b>LOOP ID - ISS</b>					<b>≥1</b>		
060	ISS	Invoice Shipment Summary	O	1			Used

**Summary:**

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
070	CTT	Transaction Totals	O	1		N3/070	Used
080	SE	Transaction Set Trailer	M	1			Must use

**Segments:**

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
	GE	Functional Group Trailer	M	1			Used
	IEA	Interchange Control Trailer	M	1			Used

**Notes:**

- 2/015 The QTY segment is used to specify a quantity of units which are expected as payments, e.g., trade-ins or returns.
- 3/070 Number of line items (CTT01) is the accumulation of the number of IT1 segments. If used, hash total (CTT02) is the sum of the value of quantities invoiced (IT102) for each IT1 segment.

# ISA

## Interchange Control Header

Pos: N/A      Max: 1  
Mandatory  
Loop: N/A      Elements: 16

To start and identify an interchange of zero or more functional groups and interchange-related control segments.

### Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>										
ISA01	I01	<b>Authorization Information Qualifier</b> <b>Description:</b> Code to identify the type of information in the Authorization Information  <table><tr><td><u>Code</u></td><td><u>Name</u></td></tr><tr><td>00</td><td>No Authorization Information Present (No Meaningful Information in I02)</td></tr></table>	<u>Code</u>	<u>Name</u>	00	No Authorization Information Present (No Meaningful Information in I02)	M	ID	2/2	Must use						
<u>Code</u>	<u>Name</u>															
00	No Authorization Information Present (No Meaningful Information in I02)															
ISA02	I02	<b>Authorization Information</b> <b>Description:</b> Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01)	M	AN	10/10	Must use										
ISA03	I03	<b>Security Information Qualifier</b> <b>Description:</b> Code to identify the type of information in the Security Information  <table><tr><td><u>Code</u></td><td><u>Name</u></td></tr><tr><td>00</td><td>No Security Information Present (No Meaningful Information in I04)</td></tr></table>	<u>Code</u>	<u>Name</u>	00	No Security Information Present (No Meaningful Information in I04)	M	ID	2/2	Must use						
<u>Code</u>	<u>Name</u>															
00	No Security Information Present (No Meaningful Information in I04)															
ISA04	I04	<b>Security Information</b> <b>Description:</b> This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03)	M	AN	10/10	Must use										
ISA05	I05	<b>Interchange ID Qualifier</b> <b>Description:</b> Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified  <table><tr><td><u>Code</u></td><td><u>Name</u></td></tr><tr><td>01</td><td>Duns (Dun &amp; Bradstreet)</td></tr><tr><td>09</td><td>X.121 (CCITT)</td></tr><tr><td>12</td><td>Phone (Telephone Companies)</td></tr><tr><td>ZZ</td><td>Mutually Defined</td></tr></table>	<u>Code</u>	<u>Name</u>	01	Duns (Dun & Bradstreet)	09	X.121 (CCITT)	12	Phone (Telephone Companies)	ZZ	Mutually Defined	M	ID	2/2	Must use
<u>Code</u>	<u>Name</u>															
01	Duns (Dun & Bradstreet)															
09	X.121 (CCITT)															
12	Phone (Telephone Companies)															
ZZ	Mutually Defined															
ISA06	I06	<b>Interchange Sender ID</b> <b>Description:</b> Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element	M	AN	15/15	Must use										
ISA07	I05	<b>Interchange ID Qualifier</b> <b>Description:</b> Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified  <table><tr><td><u>Code</u></td><td><u>Name</u></td></tr><tr><td>01</td><td>Duns (Dun &amp; Bradstreet)</td></tr></table>	<u>Code</u>	<u>Name</u>	01	Duns (Dun & Bradstreet)	M	ID	2/2	Must use						
<u>Code</u>	<u>Name</u>															
01	Duns (Dun & Bradstreet)															
ISA08	I07	<b>Interchange Receiver ID</b> <b>Description:</b> Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them  <table><tr><td><u>Code</u></td><td><u>Name</u></td></tr><tr><td>144846607</td><td>Duns (Dun &amp; Bradstreet)</td></tr></table>	<u>Code</u>	<u>Name</u>	144846607	Duns (Dun & Bradstreet)	M	AN	15/15	Must use						
<u>Code</u>	<u>Name</u>															
144846607	Duns (Dun & Bradstreet)															
ISA09	I08	<b>Interchange Date</b>	M	DT	6/6	Must										

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		<b>Description:</b> Date of the interchange				use
ISA10	I09	<b>Interchange Time</b> <b>Description:</b> Time of the interchange	M	TM	4/4	Must use
ISA11	I10	<b>Interchange Control Standards Identifier</b> <b>Description:</b> Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer All valid standard codes are used.	M	ID	1/1	Must use
ISA12	I11	<b>Interchange Control Version Number</b> <b>Description:</b> This version number covers the interchange control segments <b>Code</b> <b>Name</b> 00400    Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1997	M	ID	5/5	Must use
ISA13	I12	<b>Interchange Control Number</b> <b>Description:</b> A control number assigned by the interchange sender	M	N0	9/9	Must use
ISA14	I13	<b>Acknowledgment Requested</b> <b>Description:</b> Code sent by the sender to request an interchange acknowledgment (TA1) All valid standard codes are used.	M	ID	1/1	Must use
ISA15	I14	<b>Usage Indicator</b> <b>Description:</b> Code to indicate whether data enclosed by this interchange envelope is test, production or information All valid standard codes are used.	M	ID	1/1	Must use
ISA16	I15	<b>Component Element Separator</b> <b>Description:</b> Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator	M		1/1	Must use

**Example:**

ISA\*00\*    \*00\*    \*ZZ\*TS ID    \*01\*144846607    \*040219\*0600\*U\*00400\*000000001\*0\*P\*:

**GS****Functional Group Header**

<b>Pos: N/A</b>	<b>Max: 1</b>
<b>Mandatory</b>	
<b>Loop: N/A</b>	<b>Elements: 8</b>

To indicate the beginning of a functional group and to provide control information.

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
GS01	479	<b>Functional Identifier Code</b> <b>Description:</b> Code identifying a group of application related transaction sets All valid standard codes are used.	M	ID	2/2	Must use				
GS02	142	<b>Application Sender's Code</b> <b>Description:</b> Code identifying party sending transmission; codes agreed to by trading customers	M	AN	2/15	Must use				
GS03	124	<b>Application Receiver's Code</b> <b>Description:</b> Code identifying party receiving transmission. Codes agreed to by trading customers  <table border="0"> <tr> <td style="text-align: center;"><u>Code</u></td> <td style="text-align: center;"><u>Name</u></td> </tr> <tr> <td style="text-align: center;">144846607</td> <td style="text-align: center;">Duns (Dun &amp; Bradstreet)</td> </tr> </table>	<u>Code</u>	<u>Name</u>	144846607	Duns (Dun & Bradstreet)	M	AN	2/15	Must use
<u>Code</u>	<u>Name</u>									
144846607	Duns (Dun & Bradstreet)									
GS04	373	<b>Date</b> <b>Description:</b> Date expressed as CCYYMMDD	M	DT	8/8	Must use				
GS05	337	<b>Time</b> <b>Description:</b> Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	M	TM	4/8	Must use				
GS06	28	<b>Group Control Number</b> <b>Description:</b> Assigned number originated and maintained by the sender	M	N0	1/9	Must use				
GS07	455	<b>Responsible Agency Code</b> <b>Description:</b> Code used in conjunction with Data Element 480 to identify the issuer of the standard All valid standard codes are used.	M	ID	1/2	Must use				
GS08	480	<b>Version / Release / Industry Identifier Code</b> <b>Description:</b> Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed All valid standard codes are used.	M	AN	1/12	Must use				

**Example:**

GS\*IN\*TS ID\*144846607\*20040219\*0600\*1\*X\*004010



**ST****Transaction Set Header****Pos: 010** **Max: 1**  
**Heading - Mandatory**  
**Loop: N/A** **Elements: 2**

To indicate the start of a transaction set and to assign a control number.

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ST01	143	<b>Transaction Set Identifier Code</b> <b>Description:</b> Code uniquely identifying a Transaction Set All valid standard codes are used.	M	ID	3/3	Must use
ST02	329	<b>Transaction Set Control Number</b> <b>Description:</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9	Must use

**Example:**

ST\*810\*0000001

**BIG****Beginning Segment for Invoice**

<b>Pos: 020</b>	<b>Max: 1</b>
<b>Heading - Mandatory</b>	
<b>Loop: N/A</b>	<b>Elements: 7</b>

To indicate the beginning of an invoice transaction set and transmit identifying numbers and dates

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
BIG01	373	<b>Date</b> <b>Description:</b> Date expressed as CCYYMMDD	M	DT	8/8	Must use				
BIG02	76	<b>Invoice Number</b> <b>Description:</b> Identifying number assigned by issuer	M	AN	1/22	Must use				
BIG03	373	<b>Date</b> <b>Description:</b> Date expressed as CCYYMMDD	M	DT	8/8	Used				
BIG04	324	<b>Purchase Order Number</b> <b>Description:</b> Identifying number for Purchase Order assigned by the orderer/purchaser	M	AN	1/22	Used				
BIG05	328	<b>Release Number</b> <b>Description:</b> Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction	O	AN	1/30	Used				
BIG07	640	<b>Transaction Type Code</b> <b>Description:</b> Code specifying the type of transaction  <table border="0"> <tr> <td><u>Code</u></td> <td><u>Name</u></td> </tr> <tr> <td>DI</td> <td>Debit Invoice</td> </tr> </table>	<u>Code</u>	<u>Name</u>	DI	Debit Invoice	O	ID	2/2	Used
<u>Code</u>	<u>Name</u>									
DI	Debit Invoice									
BIG08	353	<b>Transaction Set Purpose Code</b> <b>Description:</b> Code identifying purpose of transaction set  <table border="0"> <tr> <td><u>Code</u></td> <td><u>Name</u></td> </tr> <tr> <td>00</td> <td>Original</td> </tr> </table>	<u>Code</u>	<u>Name</u>	00	Original	O	ID	2/2	Used
<u>Code</u>	<u>Name</u>									
00	Original									

**Example:**

BIG\*20040219\*2224452\*20040128\*79259\*\*\*\*DI\*00

<b>NTE</b>	<b>Note/Special Instruction</b>	<b>Pos: 030</b>	<b>Max: 100</b>
		<b>Heading - Optional</b>	<b>Loop: N/A</b>
		<b>Elements: 2</b>	

To transmit information in a free-form format, if necessary, for comment or special instruction

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>																										
NTE01	363	<p><b>Note Reference Code</b>  <b>Description:</b> Code identifying the functional area or purpose for which the note applies</p> <table> <tr> <td><u>Code</u></td> <td><u>Name</u></td> </tr> <tr> <td>ZZZ</td> <td>Mutually Defined</td> </tr> </table>	<u>Code</u>	<u>Name</u>	ZZZ	Mutually Defined	M	ID	3/3	Used																						
<u>Code</u>	<u>Name</u>																															
ZZZ	Mutually Defined																															
NTE02	352	<p><b>Description</b>  <b>Description:</b> A free-form description to clarify the related data elements and their content</p> <table> <tr> <td><u>Code</u></td> <td><u>Name</u></td> </tr> <tr> <td>DMA</td> <td>Marion, NC</td> </tr> <tr> <td>DRT</td> <td>Rogersville, TN</td> </tr> <tr> <td>DAV</td> <td>Asheville, NC</td> </tr> <tr> <td>DGV</td> <td>Greenville, SC</td> </tr> <tr> <td>DBT</td> <td>Belton, SC</td> </tr> <tr> <td>DCD</td> <td>Clio, SC</td> </tr> <tr> <td>DCI</td> <td>Columbus, IN</td> </tr> <tr> <td>RAG</td> <td>Athens, GA</td> </tr> <tr> <td>RSN</td> <td>Shelby/Kings Mountain, NC</td> </tr> <tr> <td>RGG</td> <td>Gainesville, GA</td> </tr> <tr> <td>RMM</td> <td>Madison, IN</td> </tr> <tr> <td>RCN</td> <td>Columbus, NE</td> </tr> </table>	<u>Code</u>	<u>Name</u>	DMA	Marion, NC	DRT	Rogersville, TN	DAV	Asheville, NC	DGV	Greenville, SC	DBT	Belton, SC	DCD	Clio, SC	DCI	Columbus, IN	RAG	Athens, GA	RSN	Shelby/Kings Mountain, NC	RGG	Gainesville, GA	RMM	Madison, IN	RCN	Columbus, NE	M	AN	1/80	Must use
<u>Code</u>	<u>Name</u>																															
DMA	Marion, NC																															
DRT	Rogersville, TN																															
DAV	Asheville, NC																															
DGV	Greenville, SC																															
DBT	Belton, SC																															
DCD	Clio, SC																															
DCI	Columbus, IN																															
RAG	Athens, GA																															
RSN	Shelby/Kings Mountain, NC																															
RGG	Gainesville, GA																															
RMM	Madison, IN																															
RCN	Columbus, NE																															

**Example:**

NTE\*ZZZ\*DAV

<b>REF</b>	<b>Reference Identification</b>	<b>Pos: 131</b>	<b>Max: 12</b>
		<b>Heading - Optional</b>	
		<b>Loop: N/A</b>	<b>Elements: 2</b>

To specify identifying information

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>						
REF01	128	<b>Reference Identification Qualifier</b> <b>Description:</b> Code qualifying the Reference Identification <table border="0"> <tr> <td style="text-align: center;"><u>Code</u></td> <td style="text-align: center;"><u>Name</u></td> </tr> <tr> <td style="text-align: center;">BM</td> <td style="text-align: center;">Bill of Lading Number</td> </tr> <tr> <td style="text-align: center;">SCA</td> <td style="text-align: center;">Standard Carrier Alpha Code (SCAC)</td> </tr> </table>	<u>Code</u>	<u>Name</u>	BM	Bill of Lading Number	SCA	Standard Carrier Alpha Code (SCAC)	M	ID	2/3	Must use
<u>Code</u>	<u>Name</u>											
BM	Bill of Lading Number											
SCA	Standard Carrier Alpha Code (SCAC)											
REF02	127	<b>Reference Identification</b> <b>Description:</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	M	AN	1/30	Used						

**Example:**

REF\*BM\*1426485102723047  
REF\*SCA\*BEST

<b>N1</b>	<b>Name</b>	<b>Pos: 070</b>	<b>Max: 1</b>
		<b>Heading - Mandatory</b>	
		<b>Loop: N1</b>	<b>Elements: 4</b>

To identify a party by type of organization, name, and code

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>																		
N101	98	<b>Entity Identifier Code</b> <b>Description:</b> Code identifying an organizational entity, a physical location, property or an individual  <table border="0"> <tr> <td><u>Code</u></td> <td><u>Name</u></td> </tr> <tr> <td>BT</td> <td>Bill-to-Party</td> </tr> <tr> <td>RI</td> <td>Remit To</td> </tr> <tr> <td>ST</td> <td>Ship To</td> </tr> </table>	<u>Code</u>	<u>Name</u>	BT	Bill-to-Party	RI	Remit To	ST	Ship To	M	ID	2/3	Must use										
<u>Code</u>	<u>Name</u>																							
BT	Bill-to-Party																							
RI	Remit To																							
ST	Ship To																							
N102	93	<b>Name</b> <b>Description:</b> Free-form name	M	AN	1/60	Used																		
N103	66	<b>Identification Code Qualifier</b> <b>Description:</b> Code designating the system/method of code structure used for Identification Code (67)  <table border="0"> <tr> <td><u>Code</u></td> <td><u>Name</u></td> </tr> <tr> <td>ZZ</td> <td>Mutually Defined</td> </tr> <tr> <td>1</td> <td>DUNS Number</td> </tr> </table>	<u>Code</u>	<u>Name</u>	ZZ	Mutually Defined	1	DUNS Number	M	ID	1/2	Used												
<u>Code</u>	<u>Name</u>																							
ZZ	Mutually Defined																							
1	DUNS Number																							
N104	67	<b>Identification Code</b> <b>Description:</b> Code identifying a party or other code  <table border="0"> <tr> <td><u>N101 Code</u></td> <td><u>Name</u></td> </tr> <tr> <td>BT</td> <td>Code from NTE02</td> </tr> <tr> <td>RI</td> <td>Supplier's DUNS Number</td> </tr> <tr> <td>ST</td> <td>001 - Greenville</td> </tr> <tr> <td></td> <td>003 - Belton</td> </tr> <tr> <td></td> <td>004 - Asheville</td> </tr> <tr> <td></td> <td>006 - Marion</td> </tr> <tr> <td></td> <td>043 - Clio</td> </tr> <tr> <td></td> <td>065 - Gainesville</td> </tr> </table>	<u>N101 Code</u>	<u>Name</u>	BT	Code from NTE02	RI	Supplier's DUNS Number	ST	001 - Greenville		003 - Belton		004 - Asheville		006 - Marion		043 - Clio		065 - Gainesville	M	AN	2/80	Used
<u>N101 Code</u>	<u>Name</u>																							
BT	Code from NTE02																							
RI	Supplier's DUNS Number																							
ST	001 - Greenville																							
	003 - Belton																							
	004 - Asheville																							
	006 - Marion																							
	043 - Clio																							
	065 - Gainesville																							

**Example:**

N1\*BT\*ROCKWELL AUTOMATION\*ZZ\*DAV  
N1\*ST\*COLINX LLC\*ZZ\*004  
N1\*RI\*TRADING SUPPLIER INFORMATION\*1\*999999

**N3****Address Information**Pos: 090 Max: 2  
Heading - Mandatory  
Loop: N1 Elements: 2

To specify the location of the named party

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N301	166	<b>Address Information</b> Description: Address information	M	AN	1/55	Must use
N302	166	<b>Address Information</b> Description: Address information	O	AN	1/55	Used

**Example:**

N3\*70 REEMS CREEK RD

N3\*ROCKWELL AUTOMATION\*1536 GENESIS ROAD

N3\*99999 NETWORK PLACE

**N4****Geographic Location****Pos: 100** **Max: 1**  
**Heading - Mandatory**  
**Loop: N1** **Elements: 3**

To specify the geographic place of the named party

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N401	19	<b>City Name</b> <b>Description:</b> Free-form text for city name	M	AN	2/30	Used
N402	156	<b>State or Province Code</b> <b>Description:</b> Code (Standard State/Province) as defined by appropriate government agency	M	ID	2/2	Used
N403	116	<b>Postal Code</b> <b>Description:</b> Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	M	ID	3/15	Used

**Example:**N4\*CROSSVILLE\*TN\*38555  
N4\*WEAVERVILLE\*NC\*28787  
N4\*CITY\*ST\*ZIP

**ITD****Terms of Sale/Deferred Terms of Sale**
 Pos: 130                      Max: >1  
 Heading - Optional  
 Loop: N/A                      Elements: 6

To specify terms of sale

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ITD01	336	<b>Terms Type Code</b> <b>Description:</b> Code identifying type of payment terms All valid standard codes are used.	O	ID	2/2	Used
ITD02	333	<b>Terms Basis Date Code</b> <b>Description:</b> Code identifying the beginning of the terms period All valid standard codes are used.	O	ID	1/2	Used
ITD03	338	<b>Terms Discount Percent</b> <b>Description:</b> Terms discount percentage, expressed as a percent, available to the purchaser if an invoice is paid on or before the Terms Discount Due Date	O	R	1/6	Used
ITD05	351	<b>Terms Discount Days Due</b> <b>Description:</b> Number of days in the terms discount period by which payment is due if terms discount is earned	C	N0	1/3	Used
ITD07	386	<b>Terms Net Days</b> <b>Description:</b> Number of days until total invoice amount is due (discount not applicable)	O	N0	1/3	Used
ITD12	352	<b>Description</b> <b>Description:</b> A free-form description to clarify the related data elements and their content	O	AN	1/80	Must use

**Example:**

ITD\*05\*9\*9\*\*10\*\*30\*\*\*\*\*3% 10 DAYS, NET 30 DAYS



# DTM

## Date/Time Reference

Pos: 140 Max: 10  
Heading - Optional  
Loop: N/A Elements: 2

To specify pertinent dates and times

### Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
DTM01	374	<b>Date/Time Qualifier</b> <b>Description:</b> Code specifying type of date or time <table><tr><td><u>Code</u></td><td><u>Name</u></td></tr><tr><td>011</td><td>Shipped</td></tr></table>	<u>Code</u>	<u>Name</u>	011	Shipped	M	ID	3/3	Must use
<u>Code</u>	<u>Name</u>									
011	Shipped									
DTM02	373	<b>Date</b> <b>Description:</b> Date expressed as CCYYMMDD	C	DT	8/8	Used				

### Example:

DTM\*011\*20040218

# FOB

## F.O.B. Related Instructions

Pos: 150 Max: 1  
Heading - Optional  
Loop: N/A Elements: 4

To specify transportation instructions relating to shipment

### Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>																								
FOB01	146	<b>Shipment Method of Payment</b> <b>Description:</b> Code identifying payment terms for transportation charges <table><thead><tr><th><u>Code</u></th><th><u>Name</u></th></tr></thead><tbody><tr><td>BP</td><td>Paid by Buyer</td></tr><tr><td>CC</td><td>Collect</td></tr><tr><td>CD</td><td>Collect on Delivery</td></tr><tr><td>DF</td><td>Defined by Buyer and Seller</td></tr><tr><td>NC</td><td>Service Freight, No Charge</td></tr><tr><td>PC</td><td>Prepaid but Charged to Customer</td></tr><tr><td>PD</td><td>Prepaid by Processor</td></tr><tr><td>PO</td><td>Prepaid Only</td></tr><tr><td>PP</td><td>Prepaid (by Seller)</td></tr><tr><td>PS</td><td>Paid by Seller</td></tr><tr><td>PU</td><td>Pickup</td></tr></tbody></table>	<u>Code</u>	<u>Name</u>	BP	Paid by Buyer	CC	Collect	CD	Collect on Delivery	DF	Defined by Buyer and Seller	NC	Service Freight, No Charge	PC	Prepaid but Charged to Customer	PD	Prepaid by Processor	PO	Prepaid Only	PP	Prepaid (by Seller)	PS	Paid by Seller	PU	Pickup	M	ID	2/2	Must use
<u>Code</u>	<u>Name</u>																													
BP	Paid by Buyer																													
CC	Collect																													
CD	Collect on Delivery																													
DF	Defined by Buyer and Seller																													
NC	Service Freight, No Charge																													
PC	Prepaid but Charged to Customer																													
PD	Prepaid by Processor																													
PO	Prepaid Only																													
PP	Prepaid (by Seller)																													
PS	Paid by Seller																													
PU	Pickup																													
FOB03	352	<b>Description</b> <b>Description:</b> A free-form description to clarify the related data elements and their content	O	AN	1/80	Used																								
FOB06	309	<b>Location Qualifier</b> <b>Description:</b> Code identifying type of location <table><thead><tr><th><u>Code</u></th><th><u>Name</u></th></tr></thead><tbody><tr><td>OR</td><td>Origin (Shipping Point)</td></tr></tbody></table>	<u>Code</u>	<u>Name</u>	OR	Origin (Shipping Point)	C	ID	1/2	Used																				
<u>Code</u>	<u>Name</u>																													
OR	Origin (Shipping Point)																													
FOB07	352	<b>Description</b> <b>Description:</b> A free-form description to clarify the related data elements and their content	O	AN	1/80	Used																								

### Example:

FOB\*CC

**IT1****Baseline Item Data (Invoice)**

<b>Pos: 010</b>	<b>Max: 99999</b>
<b>Detail - Mandatory</b>	
<b>Loop: IT1</b>	<b>Elements: 10</b>

To specify the basic and most frequently used line item data for the invoice and related transactions

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
IT101	350	<b>Assigned Identification</b> <b>Description:</b> Alphanumeric characters assigned for differentiation within a transaction set	M	AN	1/20	Used				
IT102	358	<b>Quantity Invoiced</b> <b>Description:</b> Number of units invoiced (supplier units)	M	R	1/10	Used				
IT103	355	<b>Unit or Basis for Measurement Code</b> <b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken  <table border="0"> <tr> <td><u>Code</u></td> <td><u>Name</u></td> </tr> <tr> <td>EA</td> <td>Each</td> </tr> </table>	<u>Code</u>	<u>Name</u>	EA	Each	C	ID	2/2	Used
<u>Code</u>	<u>Name</u>									
EA	Each									
IT104	212	<b>Unit Price</b> <b>Description:</b> Price per unit of product, service, commodity, etc.	C	R	1/17	Used				
IT106	235	<b>Product/Service ID Qualifier</b> <b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)  <table border="0"> <tr> <td><u>Code</u></td> <td><u>Name</u></td> </tr> <tr> <td>BP</td> <td>Buyer's Part Number</td> </tr> </table>	<u>Code</u>	<u>Name</u>	BP	Buyer's Part Number	M	ID	2/2	Used
<u>Code</u>	<u>Name</u>									
BP	Buyer's Part Number									
IT107	234	<b>Product/Service ID</b> <b>Description:</b> Identifying number for a product or service	M	AN	1/48	Used				
IT108	235	<b>Product/Service ID Qualifier</b> <b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)  <table border="0"> <tr> <td><u>Code</u></td> <td><u>Name</u></td> </tr> <tr> <td>VP</td> <td>Vendor's (Seller's) Part Number</td> </tr> </table>	<u>Code</u>	<u>Name</u>	VP	Vendor's (Seller's) Part Number	C	ID	2/2	Used
<u>Code</u>	<u>Name</u>									
VP	Vendor's (Seller's) Part Number									
IT109	234	<b>Product/Service ID</b> <b>Description:</b> Identifying number for a product or service	C	AN	1/48	Used				
IT110	235	<b>Product/Service ID Qualifier</b> <b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)  <table border="0"> <tr> <td><u>Code</u></td> <td><u>Name</u></td> </tr> <tr> <td>PL</td> <td>Purchaser's Order Line Number</td> </tr> </table>	<u>Code</u>	<u>Name</u>	PL	Purchaser's Order Line Number	C	ID	2/2	Used
<u>Code</u>	<u>Name</u>									
PL	Purchaser's Order Line Number									
IT111	234	<b>Product/Service ID</b> <b>Description:</b> Identifying number for a product or service	C	AN	1/48	Used				

**Example:**

IT1\*10000\*99\*EA\*99.99\*\*BP\*107159\*VP\*999999

<b>QTY</b>	<b>Quantity</b>	<b>Pos: 015</b>	<b>Max: 5</b>
		<b>Detail - Optional</b>	
		<b>Loop: IT1</b>	<b>Elements: 2</b>

To specify quantity information

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
QTY01	673	<b>Quantity Qualifier</b> <b>Description:</b> Code specifying the type of quantity <table style="margin-left: 40px; border: none;"> <tr> <td style="text-align: center;"><u>Code</u></td> <td style="text-align: center;"><u>Name</u></td> </tr> <tr> <td style="text-align: center;">63</td> <td style="text-align: center;">On Order Quantity</td> </tr> </table>	<u>Code</u>	<u>Name</u>	63	On Order Quantity	M	ID	2/2	Must use
<u>Code</u>	<u>Name</u>									
63	On Order Quantity									
QTY02	380	<b>Quantity</b> <b>Description:</b> Numeric value of ordered quantity	C	R	1/15	Used				

**Example:**

QTY\*63\*99

**TXI****Tax Information**Pos: 040 Max: 10  
Detail - Optional  
Loop: IT1 Elements: 3

To specify tax information

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
TXI01	963	<b>Tax Type Code</b> <b>Description:</b> Code specifying the type of tax All valid standard codes are used.	M	ID	2/2	Must use
TXI02	782	<b>Monetary Amount</b> <b>Description:</b> Monetary amount	C	R	1/18	Used
TXI03	954	<b>Percent</b> <b>Description:</b> Percentage expressed as a decimal	C	R	1/10	Used

**Example:**

TXI\*ZZ\*9.99\*0.9

<b>CTP</b>	<b>Pricing Information</b>	<b>Pos: 050</b>	<b>Max: 25</b>
		<b>Detail - Mandatory</b>	
		<b>Loop: IT1</b>	<b>Elements: 5</b>

To specify pricing information

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CTP02	236	<b>Price Identifier Code</b> <b>Description:</b> Code identifying pricing specification <u>Code</u> <u>Name</u> DIS Distributor's Price INV      Invoice Billing Price	M	ID	3/3	Used
CTP03	212	<b>Unit Price</b> <b>Description:</b> Price per unit of product, service, commodity, etc.	M	R	1/17	Used
CTP06	648	<b>Price Multiplier Qualifier</b> <b>Description:</b> Code indicating the type of price multiplier <u>Code</u> <u>Name</u> DIS      Discount Multiplier	O	ID	3/3	Used
CTP07	649	<b>Multiplier</b> <b>Description:</b> Value to be used as a multiplier to obtain a new value	C	R	1/10	Used
CTP08	782	<b>Monetary Amount</b> <b>Description:</b> Monetary amount	M	R	1/18	Used

**Example:**

CTP\*\*INV\*9.9999\*\*\*DIS\*9.9999\*99.99

<b>PID</b>	<b>Product/Item Description</b>	<b>Pos: 060</b>	<b>Max: 1</b>
		<b>Detail - Optional</b>	
		<b>Loop: PID</b>	<b>Elements: 2</b>

To describe a product or process in coded or free-form format

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PID01	349	<b>Item Description Type</b> <b>Description:</b> Code indicating the format of a description <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"><u>Code</u> F</div> <div style="text-align: center;"><u>Name</u> Free-form</div> </div>	M	ID	1/1	Must use
PID05	352	<b>Description</b> <b>Description:</b> A free-form description to clarify the related data elements and their content	C	AN	1/80	Used

**Example:**

PID\*F\*\*\*\*POW WEG COG BEL

<b>TDS</b>	<b>Total Monetary Value Summary</b>	<b>Pos: 010</b> <b>Max: 1</b> <b>Summary - Mandatory</b> <b>Loop: N/A</b> <b>Elements: 1</b>
------------	-------------------------------------	--

To specify the total invoice discounts and amounts

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
TDS01	610	<b>Amount</b> <b>Description: Monetary amount</b>	M	N2	1/15	<b>Must use</b>

**Example:**

TDS\*9999



# SAC

## Service, Promotion, Allowance, or Charge Information

Pos: 040 Max: 1  
Summary - Optional  
Loop: SAC Elements: 6

To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

### Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>						
SAC01	248	<b>Allowance or Charge Indicator</b> <b>Description:</b> Code which indicates an allowance or charge for the service specified  <table><tr><td><u>Code</u></td><td><u>Name</u></td></tr><tr><td>A</td><td>Allowance</td></tr><tr><td>C</td><td>Charge</td></tr></table>	<u>Code</u>	<u>Name</u>	A	Allowance	C	Charge	M	ID	1/1	Must use
<u>Code</u>	<u>Name</u>											
A	Allowance											
C	Charge											
SAC02	1300	<b>Service, Promotion, Allowance, or Charge Code</b> <b>Description:</b> Code identifying the service, promotion, allowance, or charge All valid standard codes are used. D240 used for Freight.	C	ID	4/4	Used						
SAC05	610	<b>Amount</b> <b>Description:</b> Monetary amount	M	N2	1/15	Used						
SAC06	378	<b>Allowance/Charge Percent Qualifier</b> <b>Description:</b> Code indicating on what basis allowance or charge percent is calculated All valid standard codes are used.	C	ID	1/1	Used						
SAC07	332	<b>Percent</b> <b>Description:</b> Percent expressed as a percent	C	R	1/6	Used						
SAC15	352	<b>Description</b> <b>Description:</b> A free-form description to clarify the related data elements and their content	M	AN	1/80	Used						

### Example:

SAC\*A\*\*\*\*9.99\*1

**ISS****Invoice Shipment Summary**

<b>Pos: 060</b>	<b>Max: 1</b>
<b>Summary - Optional</b>	
<b>Loop: ISS</b>	<b>Elements: 4</b>

To specify summary details of total items shipped in terms of quantity, weight, and volume

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
ISS01	382	<b>Number of Units Shipped</b> <b>Description:</b> Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set	C	R	1/10	Used				
ISS02	355	<b>Unit or Basis for Measurement Code</b> <b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken  <table border="0"> <tr> <td><u>Code</u></td> <td><u>Name</u></td> </tr> <tr> <td>PK</td> <td>Package</td> </tr> </table>	<u>Code</u>	<u>Name</u>	PK	Package	C	ID	2/2	Used
<u>Code</u>	<u>Name</u>									
PK	Package									
ISS03	81	<b>Weight</b> <b>Description:</b> Numeric value of weight	C	R	1/10	Used				
ISS04	355	<b>Unit or Basis for Measurement Code</b> <b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken  <table border="0"> <tr> <td><u>Code</u></td> <td><u>Name</u></td> </tr> <tr> <td>LB</td> <td>Pound</td> </tr> </table>	<u>Code</u>	<u>Name</u>	LB	Pound	C	ID	2/2	Used
<u>Code</u>	<u>Name</u>									
LB	Pound									

**Example:**

ISS\*9\*PK\*9\*LB

<b>CTT</b>	<b>Transaction Totals</b>	<b>Pos: 070</b>	<b>Max: 1</b>
		<b>Summary - Optional</b>	
		<b>Loop: N/A</b>	<b>Elements: 2</b>

To transmit a hash total for a specific element in the transaction set

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CTT01	354	<b>Number of Line Items</b> <b>Description:</b> Total number of line items in the transaction set	M	N0	1/6	Must use
CTT02	347	<b>Hash Total</b> <b>Description:</b> Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element.	O	R	1/10	Used

**Example:**

CTT\*1\*99

**SE****Transaction Set Trailer****Pos: 080**      **Max: 1**  
**Summary - Mandatory**  
**Loop: N/A**      **Elements: 2**

To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SE01	96	<b>Number of Included Segments</b> <b>Description:</b> Total number of segments included in a transaction set including ST and SE segments	M	N0	1/10	Must use
SE02	329	<b>Transaction Set Control Number</b> <b>Description:</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9	Must use

**Example:**

SE\*27\*0000001

**GE****Functional Group Trailer**Pos: N/A      Max: 1  
Mandatory  
Loop: N/A      Elements: 2

To indicate the end of a functional group and to provide control information

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GE01	97	<b>Number of Transaction Sets Included</b> <b>Description:</b> Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	M	N0	1/6	Must use
GE02	28	<b>Group Control Number</b> <b>Description:</b> Assigned number originated and maintained by the sender	M	N0	1/9	Must use

**Example:**

GE\*1\*1

**IEA****Interchange Control Trailer**Pos: N/A      Max: 1  
Mandatory  
Loop: N/A      Elements: 2

To define the end of an interchange of zero or more functional groups and interchange-related control segments

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
IEA01	I16	<b>Number of Included Functional Groups</b> Description: A count of the number of functional groups included in an interchange	M	N0	1/5	Must use
IEA02	I12	<b>Interchange Control Number</b> Description: A control number assigned by the interchange sender	M	N0	9/9	Must use

**Example:**

IEA\*1\*000000001