



AS2 Specifications

URL	https://as2.rack-a-tiers.com
ID	RackatiersAs2
PORT	80
MDN	Synchronous MDN
HASHING ENCRYPTION	SHA256
ENCRYPTION	3DES
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Contents

AS2 Specifications	1
850 Inbound Purchase Order	3
ST Transaction Set Header	4
BEG Beginning Segment for Purchase Order	5
CUR Currency	6
REF Reference Information	7
TAX Tax Reference	8
FOB F.O.B Related Instructions	9
DTM Date/Time Reference	10
Loop N9	11
N9 Reference Identification	12
MSG Message Text	13
Loop N1	14
N1 Party Identification	15
N3 Party Location	16
N4 Geographic Location	17
Loop PO1 Baseline Item Data	18
PO1 Baseline Item Data	19
Loop PID Product/Item Description	21
PID Product/Item Description	22
DTM Date/Time Reference	23
Loop CTT Transaction Totals	24
CTT Transaction Totals	25
SE Transaction Set Trailer	26

850 Inbound Purchase Order

Heading:

<u>Pos</u>	<u>Id</u>	<u>Element Name</u>	<u>Required</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
010	ST	Transaction Set Header	M	1		Must Use
020	BEG	Beginning Segment for Purchase Order	M	1		Must Use
040	CUR	Currency	O	1		Used
050	REF	Reference Information	O	>1		Recommended
070	TAX	Sales Tax Reference	O	2		Used
080	FOB	F.O.B. Related Instructions	O	1		Used
150	DTM	Date/Time Reference	O	1		Used
	N9 LOOP				1000	
295	N9	Extended Reference Information	O	1		Used
300	MSG	Message Text	O	1000		Used
	N1 LOOP				>1	Used
310	N1	Party Identification	M	1		Used
320	N3	Party Location	O	2		
330	N4	Geographic Location	O	>1		

Detail:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Required</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
	PO1 LOOP				100000	Must Use
010	PO1	Baseline Item Data	M	1		Must Use
	PID LOOP					
050	PID	Product/Item Description	O	1000		Used
210	DTM	Date/Time Reference	O	1		Used

Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Required</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
	CTT LOOP				1	Used
010	CTT	Transaction Totals	M	1		Must Use
030	SE	Transaction Set Trailer	M	1		

ST Transaction Set Header

Pos: 010	Max: 1
Heading – Mandatory	
Loop: N/A	Elements: 2

Usage: Must use

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

EDI Example: ST*850*0002~

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Required</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ST01	143	Transaction Set Identifier Code Description: Code uniquely identifying a Transaction Set	M	ID	3/3	Must Use
ST02	329	Transaction Set Control Number Description: 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

Semantics:

1. The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

BEG Beginning Segment for Purchase Order

Pos: 020	Max: 1
Heading – Mandatory	
Loop: N/A	Elements: 4

Usage: Must use

Purpose: To indicate the beginning of the Purchase Order Transaction Set and transmit identifying numbers and dates.

EDI Example: BEG*00*NE*100939**20221128

Element Summary:

Ref	Id	Element Name	Required	Type	Min/Max	Usage						
BEG01	353	Transaction Set Purpose Code Description: Code identifying purpose of transaction set	M	ID	2/2	Must Use						
BEG02	92	Purchase Order Type Code Description: Code specifying the type of Purchase Order <table><tr><th>Code</th><th>Name</th></tr><tr><td>DS</td><td>Dropship</td></tr><tr><td>NE</td><td>New Order</td></tr></table>	Code	Name	DS	Dropship	NE	New Order	M	ID	2/2	Must Use
Code	Name											
DS	Dropship											
NE	New Order											
BEG03	324	Purchase Order Number Description: Identifying number for Purchase Order assigned by the orderer/purchaser	M	AN	1/22	Must Use						
BEG05	373	Date – Purchase Order Description: Date expressed as CCYYMMDD	M	DT	8/8	Must Use						

Semantics:

1. BEG05 is the date assigned by the purchaser to purchase order.

Comments:

1. BEG02 – “DS” is Recommended if Purchase order is a Dropship

CUR Currency

Pos: 040

Max: 1

Heading – Optional

Loop: N/A

Elements: 2

Usage: Used**Purpose:** To specify the currency (dollars, pounds, francs, etc.) used in a transaction.**EDI Example:** CUR*SE*CAD

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Required</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CUR01	98	Entity Identifier Code Description: Code identifying an organizational entity, a physical location, property or an individual	M	ID	2/3	Must Use
CUR02	100	Currency Code Description: Code (Standard ISO) for country in whose currency the charges are specified	M	ID	3/3	Must Use

REF Reference Information

Usage: Recommended

Purpose: To specify identifying information.

EDI Example: REF*ZZ*PUROLATOR GROUND~

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Required</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF01	128	Reference Identification Qualifier Description: Code qualifying the Reference Identification	M	ID	2/3	Must Use
REF02	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X	AN	1/30	Used

Syntax Rules:

1. R0203 - At least one of REF02 or REF03 is required.

Pos: 050	Max: >1
Heading – Recommended	
Loop: N/A	Elements: 2

TAX Tax Reference

Pos: 070	Max: >1
Heading – Optional	
Loop: N/A	Elements: 3

Usage: Used

Purpose: To provide data required for proper notification/determination of applicable taxes applying to the transaction or business described in the transaction.

EDI Example: TAX**CC*CANADA*****2~

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Required</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
TAX02	309	Location Qualifier Description: Code identifying type of location	X	ID	1/2	Used
TAX03	310	Location Identification Description: Code which identifies a specific location	X	AN	1/30	Used
TAX12	441	Tax Exempt Code Description: Code identifying exemption status from sales and use tax	O	ID	1/1	Used

Element Summary:

Syntax Rules:

1. RO103: At least one of TAX01 or TAX03 is required
2. P0203 - If either TAX02 or TAX03 is present, then the other is required.

Comments:

1. Tax ID number is, in many instances, referred to as a Tax Exemption Number. The paired (combined) use of data elements 309 and 310 provides for the designation of five taxing jurisdictions.
2. TAX01 is required if tax exemption is being claimed.

FOB F.O.B Related Instructions

Pos: 080	Max: >1
Heading – Optional	
Loop: N/A	Elements: 3

Usage: Used

Purpose: To specify transportation instructions relating to shipment.

EDI Example: FOB*PP*ZZ*F.O.B. - Shipment~

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Required</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
FOB01	146	Shipment Method of Payment Code Description: Code identifying payment terms for transportation charges	M	ID	2/2	Must Use
FOB02	309	Location Qualifier Description: Code identifying type of location	X	ID	1/2	Used
FOB03	352	Description Description: A free-form description to clarify the related data elements and their content	O	AN	1/80	Used

Element Summary:

Syntax Rules:

1. CO302 – If FOB03 is present, then FOB02 is required.

Semantics:

1. FOB01 indicates which party will pay the carrier.
2. FOB02 is the code specifying transportation responsibility location

DTM Date/Time Reference

Usage: Used

Purpose: To specify pertinent dates and times.

EDI Example: DTM*074*20221128

Pos: 150	Max: 10
Heading – Optional	
Loop: N/A	Elements: 2

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Required</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
DTM01	374	Date Qualifier Description: Code specifying type of date or time, or both date and time	M	ID	3/3	Must Use
DTM02	373	Date Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year	X	DT	8/8	Used

Syntax Rules:

1. RO20305 – At least one of DTM02, DTM03 or DTM05 is required.

Loop N9

Pos: 295	Repeat: 1000
Optional	
Loop: N9	Elements: N/A

Usage: Used

Purpose: To transmit identifying information as specified by the Reference Identification Qualifier.

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Required</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
		LOOP ID – N9			1000	
295	N9	Reference Identification	O	1		Used
300	MSG	Message Text	O	1000		Used

N9 Reference Identification

Pos: 295	Max: 1
Heading – Optional	
Loop: N9	Elements: 2

Usage: Used

Purpose: To transmit identifying information as specified by the Reference Identification Qualifier.

EDI Example: N9*L1*NOTES

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Required</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N901	128	Reference Identification Qualifier Description: Code qualifying the Reference Identification	M	ID	2/3	Must Use
N902	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X	AN	1/30	Used

Syntax Rules:

1. R0203 – At least one of N902 or N903 is required.

MSG Message Text

Pos: 300 Max: 1000

Heading – Optional

Loop: N9

Elements: 1

Usage: Used**Purpose:** To provide a free-form format that allows the transmission of text information.**EDI Example:** MSG*PROCESS AND SHIP THE FOLLOWING PLEASE!

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Required</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
MSG01	933	Free-Form Message Text	M	AN	1/264	Must Use
Description: Free-form message text						

Loop N1

Usage: Used

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

Pos: 310	Repeat: 200
Optional	
Loop: N1	Elements: N/A

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Required</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
		LOOP ID - N1		>1		
310	N1	Party Identification	O	1		Used
330	N3	Party Location	O	2		Used
340	N4	Geographic Location	O	>1		Used

N1 Party Identification

Pos: 310	Max: 1
Heading – Optional	
Loop: N1	Elements: 4

Usage: Used

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

EDI Example: N1*ST*Company Name Mfg.*9*1234567890123~

Element Summary:

Ref	Id	Element Name	Required	Type	Min/Max	Usage								
N101	98	Entity Identifier Code Description: Code identifying an organizational entity, a physical location, property or an individual <table><tr><th>Code</th><th>Name</th></tr><tr><td>BT</td><td>Bill-To-Party</td></tr><tr><td>ST</td><td>Ship To</td></tr><tr><td>DB</td><td>Distributor Branch</td></tr></table>	Code	Name	BT	Bill-To-Party	ST	Ship To	DB	Distributor Branch	M	ID	2/3	Must Use
Code	Name													
BT	Bill-To-Party													
ST	Ship To													
DB	Distributor Branch													
N102	93	Name Description: Free-form name	X	AN	1/60	Used								
N103	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification code (67) <table><tr><th>Code</th><th>Name</th></tr><tr><td>9</td><td>D-U-N-S+4</td></tr></table>	Code	Name	9	D-U-N-S+4	X	ID	1/2	Used				
Code	Name													
9	D-U-N-S+4													
N104	67	Identification Code Description: Code identifying a party or other code	X	AN	2/80	Used								

Syntax Rules:

1. RO203 – At least one of N102 or N103 is required.
2. PO302 – If either N103 or N104 is present, then the other is required.

Comments:

1. N1 – DB (Distributor Branch) is Desired
2. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the “ID Code” (N104) must provide a key to the table maintained by the transaction processing party.

N3 Party Location

Usage: Used

Purpose: To specify the location of the named party.

EDI Example: N3*Company Name Mfg.*123 Rainbow Road~

Element Summary:

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

Pos: 330

Max: 2

Heading – Optional

Loop: N1

Elements: 2

N4 Geographic Location

Usage: Used

Purpose: To specify the geographic place of the named party.

EDI Example: N4*Victoria*BC*V9B 3N2*CA~

Pos: 310	Max: >1
Heading – Optional	
Loop: N1	Elements: 4

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Required</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N401	19	City Name Description: Free-form text for city name	O	AN	2/30	Used
N402	156	State or Province Code Description: Code (Standard State/Province) as defined by appropriate government agency	O	ID	2/2	Used
N403	116	Postal Code Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	O	ID	3/15	Used
N404	26	Country Code Description: Code identifying the country	O	ID	2/3	Used

Syntax Rules:

1. C0605 - If N406 is present, then N405 is required.

Comments:

1. A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
2. 2. N402 is required only if city name (N401) is in the U.S. or Canada.

Loop PO1 Baseline Item Data

Usage: Must use

Purpose: To specify basic and most frequently used line-item data.

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Required</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
		LOOP ID – PO1			100000	
010	PO1	Baseline Item Data	M	1		Must Use
		LOOP ID – PID	O		1000	Used
050	PID	Product/Item Description	O	1		Used
210	DTM	Date/Time Reference	O	10		Used

Pos: 010	Max: 100000
Mandatory	
Loop: PO1	Elements: N/A

PO1 Baseline Item Data

Pos: 010	Max: 1
Detail – Mandatory	
Loop: PO1	Elements: 11

Usage: Must use

Purpose: To specify basic and most frequently used line-item data.

EDI Example: PO1*1*24*EA*18.1*PE*ZZ*625912480001***PI*48000~

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Required</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PO101	350	Assigned Identification Description: Alphanumeric characters assigned for differentiation within a transaction set	O	AN	1/20	Used
PO102	330	Quantity Ordered Description: Quantity ordered	X	R	1/15	Used
PO103	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	O	ID	2/2	Used
PO104	212	Unit Price Description: Price per unit of product, service, commodity, etc.	X	R	1/17	Used
PO105	639	Basis of Unit Price Code Description: Code identifying the type of unit price for an item	O	ID	2/2	Used
PO106	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) Code Used: ZZ – Barcode or VP – Vendor’s (Sellers’s) Part Number	X	ID	2/2	Used
PO107	234	Product/Service ID Description: Identifying number for a product or service	X	AN	1/48	Used
PO108	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	X	ID	2/2	Used
PO109	234	Product/Service ID Description: Identifying number for a product	X	AN	1/48	Used

or service

PO110	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	X	ID	2/2	Used
PO111	234	Product/Service ID Description: Identifying number for a product or service	X	AN	1/48	Used

Syntax Rules:

1. C0302 - If PO103 is present, then PO102 is required.
2. C0504 - If PO105 is present, then PO104 is required.
3. P0607 - If either PO106 or PO107 is present, then the other is required.
4. P0809 - If either PO108 or PO109 is present, then the other is required.
5. P1011 - If either PO110 or PO111 is present, then the other is required.

Comments:

1. PO106 Code is **ZZ** if there's a Barcode for the Product/Item OR Code **VP** will be used for the Vendor's (Seller's) Part Number of the Product/Item, if available.
2. PO107 is the Barcode/Part Number of the Product/Item.
3. See the Data Element Dictionary for a complete list of IDs.
4. PO101 is the line-item identification.
5. PO106 through PO125 provide for ten different product/service IDs per each item. For example: Case, Color, Drawing, U.P.C. No., ISBN No., Model No., or SKU.

Loop PID Product/Item Description

Usage: Used

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

Loop Summary:

Pos: 050	Repeat: 1000
Optional	
Loop: PID	Elements: N/A

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Required</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
050	PID	Product/Item Description	O	1		Used

PID Product/Item Description

Pos: 050	Max: 1
Detail – Optional	
Loop: PID	Elements: 2

Usage: Used

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

EDI Example: PID*F****MAGNETIC STUD FINDER~

Element Summary:

Ref	Id	Element Name	Required	Type	Min/Max	Usage
PID01	349	Item Description Type Description: Code indicating the format of a description	M	ID	1/1	Must Use
PID03	559	Agency Qualifier Code Description: Code identifying the agency assigning the code values	O	ID	2/2	Not Used
PID04	751	Product Description Code Description: A code from and industry code list which provides specific data about a product characteristic	O	AN	1/12	Not Used
PID05	352	Description Description: A free-form description to clarify the related data elements and their content	X	AN	1/80	Used

Syntax Rules:

1. C0403 – If PID04 is present, then PID03 is required.
2. R0405 – At least one of PID04 or PID05 is required.

Semantics:

1. Use PID03 to indicate the organization that publishes the code list being referred to.
2. PID04 should be used for industry-specific product description codes.

Comments:

1. If PID01 equals “F”, then PID05 is used. If PID01 equals “S”, then PID04 is used. If PID01 equals “X”, then both PID04 and PID05 are used.
2. If PID04 is present, then PID03 is required.
3. At least one of PID04 or PID05 is required.

DTM Date/Time Reference

Usage: Used

Purpose: To specify pertinent dates and times.

EDI Example: DTM*074*20221128~

Pos: 210	Max: 10
Detail - Optional	
Loop: PO1	Elements: 2

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Required</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
DTM01	374	Date Qualifier Description: Code specifying type of date or time, or both date and time	M	ID	3/3	Must Use
DTM02	373	Date Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year	X	DT	8/8	Must Use

Syntax Rules:

1. RO20305 – At least one of DTM02, DTM03 or DTM05 is required.

Loop CTT Transaction Totals

Usage: Used

Pos: 010

Repeat: 1

Optional

Loop: CTT

Elements: N/A

Purpose: To transmit a hash total for a specified element in the transaction set.

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Required</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
010	CTT	Transaction Totals	O	1		Used

CTT Transaction Totals

Pos: 010	Max: 1
Summary - Optional	
Loop: CTT	Elements: 1

Usage: Used

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

EDI Example: CTT*2*15~

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Required</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CTT01	354	Number of Line Items Description: Total number of line items in the transaction set	M	N0	1/6	Must Use
CTT02	347	Hash Total Description: Sum of values of the PO1 segment	O	R	1/10	Used

Comments:

1. This segment is intended to provide hash totals to validate transaction completeness and correctness.

SE Transaction Set Trailer

Pos: 030	Max: 1
Summary – Mandatory	
Loop: N/A	Elements: 2

Usage: Must Use

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

EDI Example: SE*32*0005~

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Required</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SE01	96	Number of Included Segments Description: Total number of segments included in a transaction set including ST and SE segments	M	N0	1/10	Must Use
SE02	329	Transaction Set Control Number Description: 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

Comments:

1. SE is the last segment of each transaction set.