

**K**rugger  
**E**lectronic  
**E**xchange  
**P**artnership

***EDI Implementation  
Guide***

810 - Invoice

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## EDI Standard

ANSI X.12, version 4010

810 - Invoice

## Transmission Modes

Transmission types accepted: AS2, AS1, SMTP, FTP

EDI Identification and qualifier: 12 / 4509639558

[Test and production]

## Transmission Reception Times

Send: 24h / 24h

Receive: 24h / 24h

## File Format

### Segment and Element Separators

Separator	Graphic	Symbol	Decimal	Hex
Sub element	>	Greater than	62	3E
Element	*	Asterisk	42	2A
Segment	~	Tilde	126	7E

### Numerical Values

Description	Length	Type
Kruger product number	5	Number
Supplier number	6	Alpha

### Data Types

Class	Explication	Details
M	Mandatory	Must be present in the segment
O	Optional	May be present or not
C	Conditional	Conditional to the other element present in the segment
X	Relational	One or more elements must be present

### Element Types

Types	Description
ID	Identifier
AN	Alpha
DT	Date format CCAAMMJJ
TM	Hour HH : MM on 24 hours
Nx	Number, decimals are implicit
R	Decimals are explicit

# EDI Envelope

## ISA – Partner's Identification (Mandatory)

Elem.	Ref	ANSI X.12 description	Format		Size
ISA01	I01	Auth. Inf. Qualifier	M	ID	02/02
ISA02	I02	Auth. Information	M	AN	10/10
ISA03	I03	Sec. Inf. Qualifier	M	ID	02/02
ISA04	I04	Security Information	M	AN	10/10
ISA05	I05	Interchange ID Qualifier	M	ID	02/02
ISA06	I06	Interchange Sender ID	M	AN	15/15
ISA07	I07	Interchange ID Qualifier	M	ID	02/02
ISA08	I08	Interchange Receiver ID	M	AN	15/15
ISA09	I09	Interchange Date	M	DT	06/06
ISA10	I09	Interchange Time	M	TM	04/04
ISA11	I10	Interchange Control ID	M	ID	01/01
ISA12	I11	Interchange Version #	M	ID	05/05
ISA13	I12	Interchange Control #	M	NO	09/09
ISA14	I13	Acknowledgment Requested	M	ID	01/01
ISA15	I14	Test Indicator	M	ID	01/01
ISA16	I15	Sub-element Separator	M	AN	01/01

## GS – EDI Sub Envelope (Mandatory)

Elem.	Ref	ANSI X.12 description	Format		Size
GS01	479	Functional ID Code	M	ID	02/02
GS02	142	Application Sender Code	M	AN	02/15
GS03	124	Application Rec.'s Code	M	AN	02/15
GS04	373	Date	M	DT	08/08
GS05	337	Time	M	TM	04/08
GS06	28	Group Ctrl Number	M	NO	01/09
GS07	455	Responsible Agency Code	M	ID	01/02
GS08	480	Version/Release ID Code	M	AN	01/12

## GE – EDI Sub Envelope End (Mandatory)

Elem.	Ref	ANSI X.12 description	Format		Size
GEO1	97	Number of ST Included	M	NO	01/06
GEO2	28	Group Ctrl Number	M	NO	01/09

## IEA – EDI Envelope End (Mandatory)

Elem.	Ref	ANSI X.12 description	Format		Size
IEA01	I16	Number of GS	M	NO	01/05
IEA02	I12	Interchange Control #	M	NO	09/09

# Header

## ST – Transaction Header (Mandatory)

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

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
ST01	143	Transaction identifier	M	ID	03/03	Transaction set identifier code
ST02	329	Control number	M	AN	04/09	A unique number within the group

### Identifier Code

Code	Description
810	Invoice

### Example

ST\*810\*0001

## BIG – Beginning Invoice Segment (Mandatory)

Indicates the beginning of an invoice transaction set and transmits identifying numbers and dates

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
BIG01	373	Invoice date	M	DT	08/08	
BIG02	76	Invoice number	M	AN	01/22	
BIG03	373	Purchase order date	M	DT	08/08	
BIG04	324	Invoice number	M	AN	01/22	
BIG07	640	Document type	M	ID	02/02	

### Document Type

Code	Description
DI	Invoice
CN	Credit note

### Example

BIG\*20050615\*12345678\*20050610\*098765\*\*\*DB



## CUR – Currency (Conditional)

To specify the currency used in a transaction

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
CUR01	98	Qualifier	M	ID	02/03	Identifies the party responsible for the currency
CUR02	352	ISO currency codes	M	AN	03/03	ISO currency code identifier

[http://userpage.chemie.fu-berlin.de/diverse/doc/ISO\\_3166.html](http://userpage.chemie.fu-berlin.de/diverse/doc/ISO_3166.html)

### Qualifier List

Code	Description
SE	Supplier
BY	Buyer

### Currency Codes

Code	Description
CAD	Canadian dollars
USD	US dollars

### Example

CUR\*SE\*CAD

## REF – Reference Numbers (Conditional)

Loop: 20 iterations maximum

To specify identifying information, like supplier number, tax numbers etc.

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
REF01	128	Qualifier	M	ID	02/02	See Appendix 2
REF02	127	Reference	X	AN	01/30	Number
REF03	352	Description	X	AN	01/80	A free form textual description

### Reference Qualifiers

Code	Description
IA	Supplier numbers
DP	Department
Q1	Quote number
PK	Packing slip
GS	GST number
PS	PST number
IT	Internal client number
OI	Original invoice number in case of a credit number
PP	Purchase order revision number

### Example

REF\*IA\*CH1234\*Your supplier number at Kruger

REF\*12\*37000

REF\*Q1\*113050531\*Your quote number

## PER – Contact Information (Conditional)

Loop: maximum 3 iterations

To identify the people who can be reached, regarding the transaction

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
PER01	366	Contact function code	M	ID	02/02	Qualifier
PER02	93	Name	O	AN	01/30	Contact name
PER03	365	Communication type	C	ID	02/02	Qualifier
PER04	364	Contact number	C	AN	01/80	Telephone number
PER05	365	Communication type	C	ID	02/02	Qualifier
PER06	364	Contact number	C	AN	01/80	Fax number
PER07	365	Type de communication	C	ID	02/02	Qualifier
PER08	364	Contact number	C	AN	01/80	Email

### Contact Qualifiers

Code	Description
BD	Buyer
AP	Accounts payable
AM	Administrator

### Communication Type

Code	Description
TE	Telephone
FX	Fax
EM	Email

### Example

PER\*BD\*Jean Pierre Camire\*TE\*1-234-456-7890 ext 222\*FX\*1-234-456-7890\*EM\*jpc@kruger.com

## N1 – Name (Mandatory)

Loop: maximum 4 iterations

Identifies the parties involved in the transaction and their physical locations, with the help of segment N3 Address and N4 Geographical location

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
N101	98	Identifier code	M	ID	02/02	
N102	93	Name	X	AN	01/60	
N103	66	Qualifier	X	ID	01/02	
N104	67	Identification code	X	AN	02/80	

### Identifier Code List

Code	Description
BT	Bill to
ST	Ship to
RE	Remit to
MA	Final delivery

### Qualifier List

Code	Description
01	D.U.N.S number
12	Telephone number
ZZ	Mutually defined

### Example

N1\*BT\*Kruger inc\*12\*1234567890

## N3 – Address (Mandatory)

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
N301	166	Address line 1	M	AN	01/55	
N302	166	Address line 2	O	AN	01/55	

### Example

N3\*220 Chemin Winsord

N3\*PO Box 100

## N4 – Geographic Location (Mandatory)

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
N401	19	City	0	AN	02/30	
N402	156	Province	0	ID	02/02	
N403	116	Postal code	0	ID	03/15	
N404	26	Country	0	ID	02/03	

### Example

N4\*Bromptonville\*Qc\*H3C 2N5\*CDN

## ITD – Terms of Sale (Mandatory)

Loop: maximum 2 iterations

To specify the terms and conditions

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
ITD01	336	Term type code	0	ID	02/02	
ITD03	338	Terms discount percent	0	R	01/06	
ITD04	370	Discount due date	X	DT	08/08	
ITD06	446	Terms due date	0	DT	08/08	
ITD07	386	Terms net days	0	NO	01/03	
ITD08	362	Terms discount amount	0	N2	01/10	
ITD12	352	Description	0	AN	01/80	Textual description

### Term Type Code List

Code	Description
01	Basic
05	No discount
14	Previously agreed upon

### Example

ITD\*14\*\*\*\*\*45\*\*\*\*\*As per phone conversation

## DTM – Date (Mandatory)

Loop: maximum 10 iterations

To specify pertinent dates

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
DTM01	374	Date qualifier	M	ID	03/03	
DTM02	373	Date	X	DT	08/08	

### Date Qualifiers

Code	Description
001	Cancellation date
017	Delivery date

### Example

DTM\*017\*20050616



## FOB – Related Instructions (Optional)

To specify transportation instructions

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
FOB01	146	Payment method	M	ID	02/02	Who will pay the transport charges
FOB02	309	Location qualifier	X	ID	01/02	From which location the freight charges apply
FOB03	352	Instructions	O	AN	01/80	Text message

### Payment Method List

Code	Description	Code	Description
CC	Collect paid by Kruger	NC	No charge
PP	Prepaid	PC	Prepaid but charged

### Location Qualifiers

Code	Description
DE	FOB destination
OR	FOB origin

### Example

FOB\*CC\*OR\*Purolator Ground

# Details

## IT1 – Line Items (Mandatory)

Loop of 100000 iterations maximum

All item information is contained in the PO1, PID, MEA, REF and/or MSG

PO1 indicates the line item, quantities, unit of measure, price and product identifiers

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
IT101	350	Line number	O	AN	01/20	
IT102	330	Quantity invoiced	X	R	01/15	
IT103	355	Unit of measure	X	ID	02/02	List of unit measures, see Appendix 4
IT104	212	Price	X	R	01/17	
IT106	235	Qualifier <b>(PI)</b>	O	ID	02/02	Kruger product qualifier
IT107	234	Product number	X	AN	01/48	Kruger product number
IT108	235	Qualifier <b>(VN)</b>	O	ID	02/02	Vendor product qualifier
IT109	234	Product number	X	AN	01/48	Vendor product number
IT111	235	Qualifier <b>(UP)</b>	O	ID	02/02	Universal product number qualifier (UPC)
IT112	234	Product number	X	AN	01/48	UPC number
IT113	235	Qualifier <b>(MA)</b>	O	ID	02/02	Manufacturer product qualifier
IT112	234	Product number	X	AN	01/48	Manufacturer product number

## Product ID Qualifiers

Code	Description
PI	Kruger product qualifier
VN	Vendor product qualifier
UP	Universal product qualifier (UPC)
MA	Manufacturer product qualifier

## Example

PO1\*12\*125\*PC\*\*523.26\*PI\*38080\*VN\*836TT\*UP\*123456789012\*MA\*456789

## IT3 – Additional Item Data (Mandatory)

To specify additional item details relating to variations between ordered and shipped quantities

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
IT304	383	Quantity difference	O	R	01/09	Difference between quantities ordered and shipped
IT305	371	Reason qualifier	O	ID	02/02	

### Reason Qualifier List

Code	Description
MP	Minimum order
QH	Quantity on hand
PC	Packing

### Example

IT3\*\*\*\*25\*QH

## PID – Product Description (Optional)

Loop: maximum 5 iterations

Product textual description

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
PID01	349	Item Description Type	M	ID	01/01	« F » by default
PID05	352	Description	X	AN	01/80	

### Example

PID\*F\*\*\*Pressure switch

## MEA – Measurements (Optional)

Loop: maximum 10 iterations

To specify physical measurements or counts, dimension, tolerances, variances and weights

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
MEA01	737	Measure	0	ID	02/02	(density, PH, absorbance, temperature, etc) see Appendix 5
MEA02	738	Measure qualifier	0	ID	01/03	See Appendix 6
MEA03	739	Value	X	R	01/20	
MEA05	740	Minimum value	X	R	01/20	
MEA06	741	Maximum value	X	R	01/20	

### Example

MEA\*AD\*CC\*25\*30

Temperature in Celsius between 25 and 30

## REF – Reference Identification (Conditional)

Manufacturer identification

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
REF01	128	Qualifier	M	ID	02/02	Identifier
REF02	127	Reference	X	AN	01/30	Manufacturer name
REF03	352	Description	X	AN	01/80	Free form text message

### Qualifier List

Code	Description
ZN	Manufacturer

### Example

REF\*ZN\*SQUARE D

# Summary

## TDS – Total Monetary Value (Mandatory)

To specify the total invoice discounts and amounts

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
TDS01	610	Invoice monetary value	M	N2	01/15	Total invoice value
TDS02	610	Sub-total	M	N2	01/15	Sub-total, includes all allowances and charges, before applicable taxes. IT DOES NOT INCLUDE TERMS DISCOUNTS.

### Example

TDS\*47223\*41054



## TXI – Applicable Taxes (Optional)

Loop 2 iterations maximum

To specify applicable taxes

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
TXI01	963	Tax type	M	ID	02-02	TPS, TVQ, TVH
TXI02	782	Monetary value	M	R	01/15	
TXI03	954	Tax percent	O	R	01/10	Ex : 7 pour la TPS

### Tax Type

Code	Description
GS	Goods and services tax
SP	Quebec sales tax
TX	Harmonized sales tax

### Example

TXI\*GS\*28.74\*7

TXI\*SP\*32.95\*7.5

## CAD – Carrier Detail (Optional)

To specify transportation details for the transaction

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
CAD01	91	Transportation method	X	ID	01/02	
CAD05	387	Carrier name	O	AN	01/15	
CAD07	128	Qualifier <b>(BM)</b>	M	ID	02/03	
CAD08	127	Bill of lading number	X	AN	01/30	

### Transportation Method

Code	Description
A	Air freight
D	Parcel post
H	Picked up by Kruger
M	Common carrier
R	Train
T	Cheapest
U	Courier service

### Example

CAD\*U\*\*\*\*PUROLATOR\*\*BM\*332211

## SAC – Allowances or Charges (Optional)

Loop: maximum 25 iterations

To identify a charge on an allowance

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
SAC01	248	Allowance or charge indicator	M	ID	01/01	
SAC02	1300	Allowance or charge identifier	X	ID	04/04	(See Appendix 3)
SAC05	610	Allowance or charge amount	O	N2	01/15	Monetary value
SAC15	352	Description	X	AN	01/80	Text message

### List of Allowances or Charges

Code	Description
C	Charge
A	Allowance

### Allowances or Charges Identifier List

Code	Description	Code	Description
A260	Advertising Allowance	F910	Quantity Discount
C310	Discount	F970	Rebate
D170	Free Goods	I170	Trade Discount
D500	Handling	I570	Warehouse Allowance
E740	New Store Discount	ZZZZ	Mutually Defined
F800	Promotional Allowance		

### Example

SAC\*A\*\*\*\* F910\*Volume rebate

## ISS – Invoice Shipment Summary (Optional)

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

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
ISS01	382	Number of units shipped	X	R	01/10	
ISS02	355	Unit of measure	X	ID	02/02	
ISS03	81	Weight	X	R2	01/10	
ISS04	355	Unit of measure	X	ID	02/02	
ISS05	183	Volume	X	R3	01/08	
ISS06	355	Unit of measure	X	ID	02/02	

### List for Units

Code	Description
MX	Mixed (palettes, parcels)
PL	Palettes
BX	Boxes
BN	Bulk
BR	Barrel

### List for Weight

Code	Description
LB	Pound
KG	Kilo

### List for Volume

Code	Description
CF	Cubic foot

CO | Cubic meter

Example

ISS\*24\*PL\*2345.98\*KG\*7890\*CO

## CTT – Items Total (Optional)

Contains the total number of line items and the hash total

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
CTT01	354	Total of line items	M	NO	01/06	
CTT02	347	Total hash items	O	R	01/10	

### Example

CTT\*20\*40

## SE – Transaction End (Mandatory)

Elem.	Ref	ANSI X.12 description	Format		Size	Comments
SE01	96	Number of included segments	M	NO	01/10	
SE02	329	Transaction number	M	AN	04/09	Same as ST_02

### Example

SE\*12\*0001

# Appendices

## Appendix 1



## Appendix 2

## Appendix 3

## Appendix 4

## Appendix 5

## Appendix 6