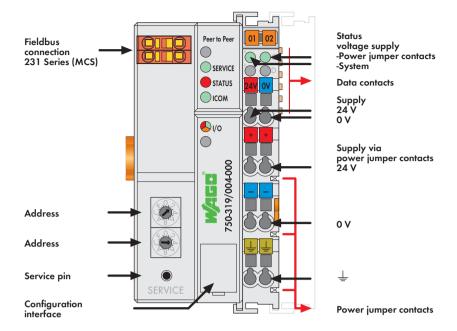
### LON® Data Exchange Coupler (Peer to Peer)

78 kbps; digital and analog signals





The data exchange coupler transfers the input process image data to the output process image of the coupled partner. The data exchange coupler is a variant of the LON $^{\scriptsize \odot}$  fieldbus coupler.

### **Applications:**

- Peer to Peer one master and one slave
- Broadcast one master and several slaves

LON® is a registered trademark of Echelon Corporation.

The coupler, together with I/O modules, is a fieldbus node which is connected to other nodes by means of a twisted wire pair. The coupler can also be integrated into existing  $\mathsf{LON}^{\oplus}$  networks if appropriate node addresses are available.

The coupler automatically creates the process image using the types and widths of data of the connected I/O modules. The input process image is transferred to the output process image of the partner or partners.

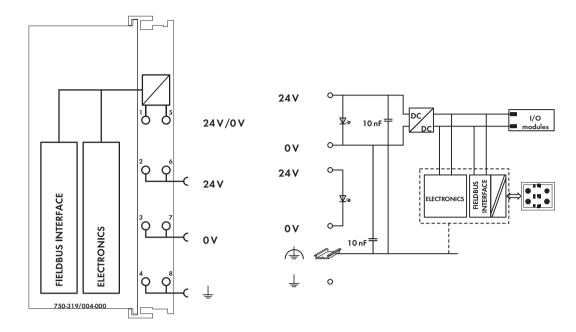
The monitoring system switches digital outputs off or stores the last analog value if the connection to the coupled partner is interrupted longer than 1 second.

Description		Item No.	Pack. Unit
Peer to Peer Coupler		750-319/004-000	1
Accessories		Item No.	Pack. Unit
Miniature WSB (	Quick marking syster	n	
Communication (	plain	248-501	5
Lucianis	with marking	see pages 352 353	
eliatatum:			
Approvals		Also see "Approvals Overview	" in Section
Conformity markin	g	CE	
.®∞ UL 508			
∘®∞ ANSI/ISA 12.12.01		Class I, Div. 2, Grp. ABCD, T4	
		BR-Ex nA II T4	
		I M2 / II 3 GD Ex nA nL IIC T4	
EN 61241-0, -1			

System Data	
No. of couplers connected to Master	64 without repeater, 127 with repeater
Transmission medium	Twisted pair - FTT
Max. length of fieldbus segment	500 m (free topology) 2700 m (bustopology)
Topology	in accordance with LON specification
Baud rate	78 kbps
Buscoupler connection	2-pole male connector, 231 Series (MCS),
	female connector (231-302) (included)

1.2

# **LONWORKS**



Technical Data	
Number of I/O modules	62
Digital signals	max. 248 (in- and outputs)
Analog signals	max. 124 (in- and outputs)
Configuration	via PC with LON Interface
Power supply	24 V DC (-15 % +20 %)
Max. input current (24 V)	500 mA
Efficiency of the power supply	87 %
Internal current consumption (5 V)	300 mA
Total current for I/O modules (5 V)	1700 mA
Isolation	500 V system/supply
Voltage via power jumper contacts	24 V DC (-15 % +20 %)
Current via power jumper contacts (max.)	10 A DC
Transceiver	FTT 10 A

General Specifications	
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm <sup>2</sup> 2.5 mm <sup>2</sup> / AWG 28 14
Stripped lengths	8 9 mm / 0.33 in
Dimensions (mm) W x H x L	51 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	200 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC: C € - immunity to interference	acc. to EN 61000-6-2 (2005)
EMC: <b>C</b> € - emission of interference	acc. to EN 61000-6-4 (2007)



## 2-Channel Digital Input Module 120 V AC

2- to 4-conductor connection; high-side switching

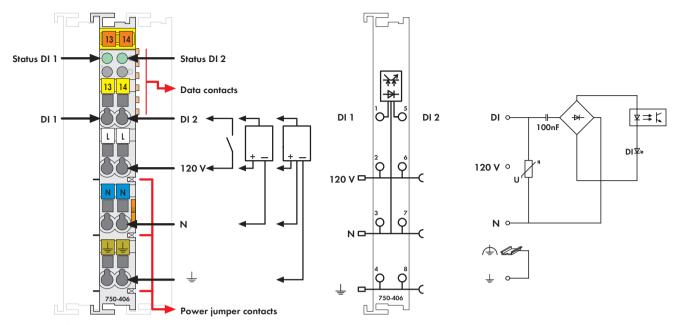


Fig. 750 Series/Technical data see page 24/Delivered without miniature WSB markers 750/753 Series marking see pages 10 ... 11 / 12 ... 13

The digital input module receives control signals from digital field devices (sensors, etc.).

The module is a 2-channel, 4-conductor device and sensors with a ground (earth) wire may be directly connected to the module.

An optocoupler is used for electrical isolation between the bus and the field side

#### Notice:

An additional supply module must be added for operation with 120VAC.

Description			Item No.	Pack. Unit	
2DI 120V AC			750-406	1011	
2DI 120V AC (wit	hout connector)		753-406	1	
1) Also available inc	lividually				
Accessories	,		Item No.	Pack. Unit	
Marcon	753 Series Co	nnectors	753-110	25	
###@###### ### W	Coding elem	ents	753-150	100	
	Miniatura W	SB Ouisk	marking system		
Germann 12	plain	3D QUICK	248-501	5	
DESCRIPTION OF	with marking		see pages 352 3	-	
white distribution	,,,,,,		ooo pagaa oo 2 a		
Approvals		Also see	"Approvals Overview"	in Section 1	
Conformity marking		C€			
Shipbuilding		ABS, BV, DNV, GL, KR, LR*, NKK*, PRS*, RINA			
		*753 Se	ries, pending		
.@∞ UL 508					
-@- UL 300	∘®∞ ANSI/ISA 12.12.01		Class I, Div. 2, Grp. ABCD, T4		
	2.01	Class I, D	10. 2, Grp. ABCD, 14		
			3 GD Ex nA IIC T4		

Nil f !t.	2	
Number of inputs	2 mA	
Current consumption (internal)	2 110 (	
Voltage via power jumper contacts	230 V AC (-15 % +20 %);	
C: 1 1. (0)	(± 20 % 1.5 s)	
Signal voltage (0)	0 V 20 V AC	
Signal voltage (1)	79 V AC 1.1 V <sub>N</sub>	
Input filter	10 ms	
Input current (typ.)	4.5 mA	
Input frequency	f (nominal) ± 10 %	
	50 Hz ± 10 %	
	60 Hz ± 10 %	
Isolation	1.5 kV eff. (field/system)*;	
	* 2.5 kV rated surge voltage;	
	Overvoltage category III	
Internal bit width	2 bits	
Wire connection	CAGE CLAMP®	
Cross sections	0.08 mm <sup>2</sup> 2.5 mm <sup>2</sup> / AWG 28 14	
Stripped lengths, 750/753 Series	8 9 mm / 0.33 in	
	9 10 mm / 0.37 in	
Width	12 mm	
Weight	37.1 g	
EMC: C € - immunity to interference	acc. to EN 61000-6-2 (2005)	
EMC: C € - emission of interference	acc. to EN 61000-6-4 (2007)	
EMC: marine applications		
- immunity to interference	acc. to Germanischer Lloyd (2003)	
EMC: marine applications	, , , , ,	
- emission of interference	acc. to Germanischer Lloyd (2003)	
	, (2000)	