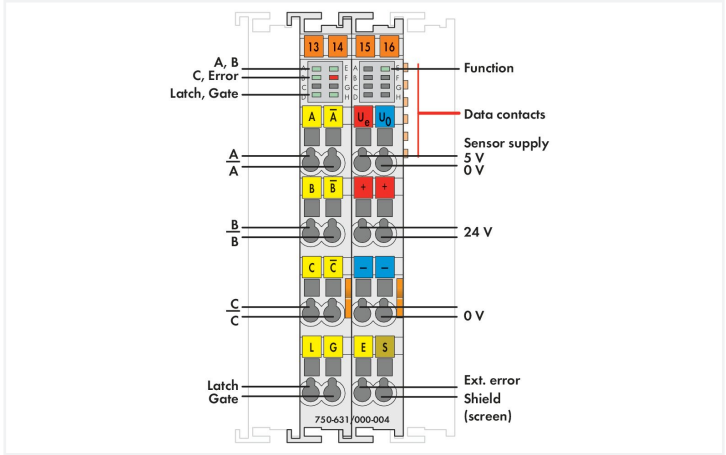
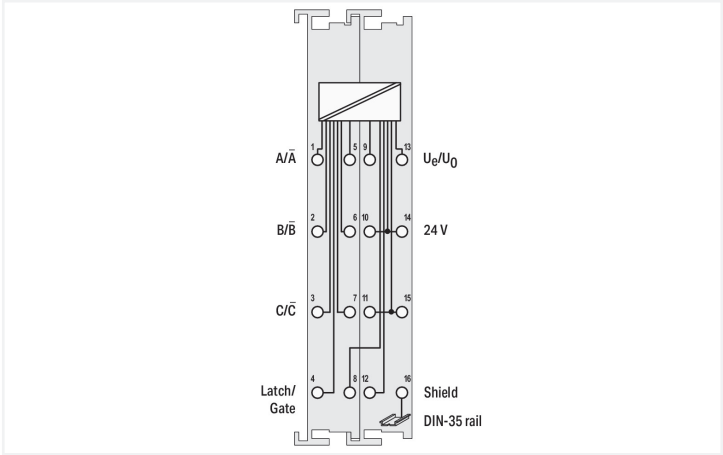
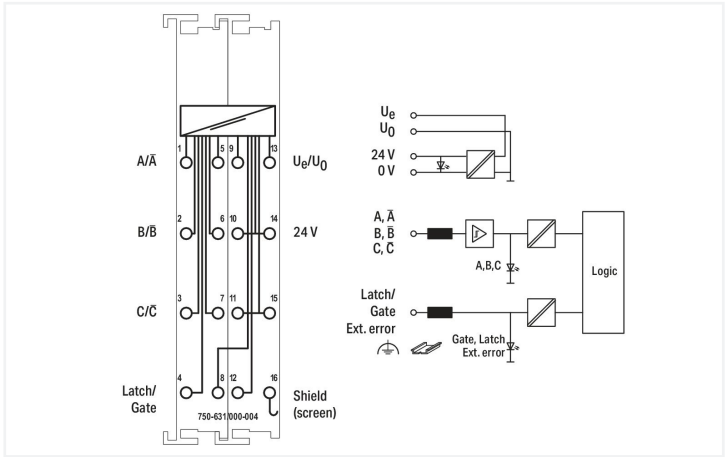




Color: ■ light gray



This module is an interface for the connection of any incremental encoder.
A 16 bit counter with quadrature encoder interface as well as a 16 bit latch for the zero impulse can be read, set, or enabled. The count of the counter will be transmitted fast and interference-free over the fieldbus to the PC, PLC, or NC.
A counter lock-out is possible using the "Gate" input.
The power supply for the transmitter is derived internally from the power jumper contacts Ue/U0.
The shield directly connects to the DIN-rail.

Technical data	
Counter depth	16 bits
Encoder connection	A; /A; B; /B; C; /C (RS-422 inputs)
Supply current (encoder) max.	200 mA
Zero impulse (latch)	16 bits
Quadrature decoder	4x evaluation
Voltage range for signal (0)	U _{ABC} = 0 V, U _{ABC/} = 5 V; Latch, gate ≤ 5.0 V; External error U ≥ 5.0 V or open input
Voltage range for signal (1)	U _{ABC} = 5 V, U _{ABC/} = 0 V; Latch, gate ≥ 15.0 V; External error U < 0.5 V
Data width	2-byte output; 5-byte input; 2x 8-bit control/status (optional); 3 additional output bytes (reserved)
Limit frequency	1000 kHz
Commands	Reading, setting, activating
Supply voltage (system)	5 VDC; via data contacts
Current consumption (5 V system supply)	50 mA
Current consumption, field supply (module with no external load)	10 mA
Isolation	500 V system/field
Indicators	LED (A, B, D, E/E, H) green: A, C, Latch, B/Function, Gate; LED (F) red: Error

Connection data

Connection technology: inputs/outputs	16 x CAGE CLAMP®
Connection type 1	Inputs/outputs
Solid conductor	0.08 ... 2.5 mm² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm² / 28 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches

Physical data

Width	24 mm / 0.945 inches
Height	100 mm / 3.937 inches
Depth	69.8 mm / 2.748 inches
Depth from upper-edge of DIN-rail	62.6 mm / 2.465 inches

Mechanical data

Mounting type	DIN-35 rail
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Material data

Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Fire load	0.17 MJ
Weight	92.1 g
Conformity marking	CE

Environmental requirements

Ambient temperature (operation)	0 ... +55 °C
Ambient temperature (storage)	-40 ... +85 °C
Protection type	IP20
Pollution degree	2 per IEC 61131-2
Operating altitude	0 ... 2000 m / 0 ... 6562 ft
Mounting position	horizontal (standing/lying); vertical
Relative humidity (without condensation)	95 %
Vibration resistance	per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	per EN 61000-6-2
EMC emission of interference	per EN 61000-6-4
Exposure to pollutants	per IEC 60068-2-42 and IEC 60068-2-43
Permissible H ₂ S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO ₂ contaminant concentration at a relative humidity 75 %	25 ppm

Commercial data

Product Group	15 (I/O System)
eCl@ss 10.0	27-24-26-05
eCl@ss 9.0	27-24-26-05
ETIM 8.0	EC001601
ETIM 7.0	EC001601
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821248309
Customs tariff number	85389099990



Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
EAC Brjansker Zertifizierungs- stelle	TP TC 020/2011	EAC RU C-DE.AM02. B.00087/19	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-DAM750			
UL Underwriters Laboratories Inc. (ORDINARY LOCATI- ONS)	UL 508	E175199 Sec.1			

Approvals for hazardous areas

Approval	Standard	Certificate Name
EAC Brjansker Zertifizierungs- stelle	TP TC 012/2011	EAC RU C-DE.AM02. B.00163/19 (2Ex nA IIC T4 Gc X)
UL Underwriters Laboratories Inc. (HAZARDOUS LOCA- TIONS)	UL 121201	E198726 Sec.1

Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 750-631/000-004	

Documentation

Manual				System Description			
Product Manual Incre- mental encoder inter- face	V 1.2.0	pdf 3192.23 KB		750/753 Series I/O- System – General Pro- duct Information	pdf 953.35 KB		
System Manual WAGO I/O System 750/753	V 3.3.3 29.08.2023	pdf 8512.61 KB		Overview on WAGO-I/ O-SYSTEM 750 appro- vals	pdf 770.48 KB		
System Manual Series 750/753							



Bid Text			
750-631/000-004	19.02.2019	xml 4.93 KB	
750-631/000-004	09.10.2017	doc 26.50 KB	

Application Notes

Application Note CoDeSys 2.3			
Anwendungshinweis für die Steuerung eines Iqgus robotlink	12.11.2015 12.11.2015	zip 1281.38 KB	

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 750-631/000-004	EPLAN Data Portal 750-631/000-004
	WSCAD Universe 750-631/000-004
	ZUKEN Portal 750-631/000-004

Device Files

Device Driver			
WAGO USB Service Kabel Treiber / Serie 750 und 857	6.5.3.0 10.09.2014	zip 4721.96 KB	

1 Compatible Products

1.1 Optional Accessories

1.1.1 DIN-rail

1.1.1.1 Mounting accessories

 Item No.: 210-196 Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	 Item No.: 210-198 Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored	 Item No.: 210-508 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored	 Item No.: 210-197 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored
 Item No.: 210-506 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored	 Item No.: 210-114 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	 Item No.: 210-118 Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	 Item No.: 210-115 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored
 Item No.: 210-112 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored	 Item No.: 210-504 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored	 Item No.: 210-113 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	 Item No.: 210-505 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored



1.1.2 Marking

1.1.2.1 Group marker carrier



[Item No.: 750-106](#)
Group marker carrier

1.1.2.2 Marker



[Item No.: 750-100](#)
Marker card; as a DIN A4 sheet; plain



[Item No.: 2009-145/000-006](#)
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



[Item No.: 2009-145/000-007](#)
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



[Item No.: 2009-145/000-023](#)
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green



[Item No.: 2009-145/000-012](#)
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



[Item No.: 2009-145/000-005](#)
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red



[Item No.: 2009-145/000-024](#)
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



[Item No.: 2009-145](#)
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



[Item No.: 2009-145/000-002](#)
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow



[Item No.: 248-501/000-006](#)
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue



[Item No.: 248-501/000-007](#)
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray



[Item No.: 248-501/000-023](#)
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green



[Item No.: 248-501/000-017](#)
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green



[Item No.: 248-501/000-012](#)
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange



[Item No.: 248-501/000-005](#)
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red



[Item No.: 248-501/000-024](#)
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet



[Item No.: 248-501](#)
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



[Item No.: 248-501/000-002](#)
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow

1.1.2.3 Marker carrier



[Item No.: 750-103](#)
Group marker carrier

1.1.3 Shield termination

1.1.3.1 Shield clamping saddles



[Item No.: 790-108](#)
Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm



[Item No.: 790-208](#)
Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm



[Item No.: 790-116](#)
Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm



[Item No.: 790-216](#)
Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm



[Item No.: 790-124](#)
Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm



[Item No.: 790-220](#)
Shield clamping saddle; 30 mm wide; 6 ... 20 mm



[Item No.: 790-140](#)
Shield clamping saddle; diameter of compatible conductor



1.1.4 System enclosure

1.1.4.1 System enclosure



Item No.: 850-825
IP65 enclosure; Aluminium (RAL 7032);
WxHxD (160x100x160 mm); 9 x M12, 4 x
M20



Item No.: 850-826
IP65 enclosure; Aluminium (RAL 7032);
WxHxD (240x100x160 mm); 4 x M20, 4 x
M16, 14 x M12 cable grip



Item No.: 850-827
IP65 enclosure; Aluminium (RAL 7032);
WxHxD (320x100x160 mm); 4 x M20, 8 x
M16, 17 x M12 cable grip



Item No.: 850-828
IP65 enclosure; Aluminium (RAL 7032);
WxHxD (480x100x160 mm); 4 x M20, 10 x
M16, 35 x M12 cable grip



Item No.: 850-826/002-000
IP65 enclosure; Aluminium (RAL 7035);
WxHxD (240x100x160 mm); 4 x M20, 4 x
M16, 14 x M12 cable grip



Item No.: 850-827/002-000
IP65 enclosure; Aluminium (RAL 7035);
WxHxD (320x100x160 mm); 4 x M20, 8 x
M16, 17 x M12 cable grip



Item No.: 850-828/002-000
IP65 enclosure; Aluminium (RAL 7035);
WxHxD (480x100x160 mm); 4 x M20, 10 x
M16, 35 x M12 cable grip



Item No.: 850-834
IP65 enclosure; Polyester (RAL 7032); Wx-
HxD (164x100x164 mm); 9 x M12, 4 x M20



Item No.: 850-835
IP65 enclosure; Polyester (RAL 7032); Wx-
HxD (244x100x164 mm); 4 x M20, 4 x
M16, 14 x M12 cable grip



Item No.: 850-836
IP65 enclosure; Polyester (RAL 7032);
WxHxD (324x100x164 mm); 4 x M20, 8 x
M16, 17 x M12 cable grip



Item No.: 850-814/002-000
IP65 enclosure; Sheet steel (RAL 7035);
WxHxD (200x120x200 mm); without flan-
ge plate



Item No.: 850-815/002-000
IP65 enclosure; Sheet steel (RAL 7035);
WxHxD (300x120x200 mm); without flan-
ge plate



Item No.: 850-816/002-000
IP65 enclosure; Sheet steel (RAL 7035);
WxHxD (400x120x200 mm); without flan-
ge plate



Item No.: 850-817/002-000
IP65 enclosure; Sheet steel (RAL 7035);
WxHxD (600x120x200 mm); without flan-
ge plate