



This module has two counters that count 24 VDC binary pulses independently of one another. The data is then transmitted to the control via the field-bus.

The counters can be set or reset with the control bytes. A counter lock-out is also possible.

The control bytes also determine the counting direction.

### Technical data

Number of counters	2
Counter depth	16 bits
Input filter	0.2 ms
Switching frequency (max.)	500 Hz
Signal characteristics	Differential
Voltage range for signal (0)	-3 ... +5 VDC (per EN 61131 Type 1)
Voltage range for signal (1)	15 ... 30 VDC (per EN 61131 Type 1)
Minimum pulse width (0, 1)	1 ms
Common-mode voltage (max.)	500 V
Data width	2 x 16-bit data; 2 x 8-bit control/status
Supply voltage (system)	5 VDC; via data contacts
Current consumption (5 V system supply)	10 mA
Supply voltage (field)	24 VDC (-15 ... +20 %); via power jumper contacts (power supply via blade contact; transmission via spring contact)
Current consumption, field supply (module with no external load)	8 mA
Isolation	500 V system/field
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2

### Connection data

Connection technology: inputs/outputs	8 x CAGE CLAMP®
Connection type 1	Inputs/outputs
Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches

### Physical data

Width	12 mm / 0.472 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	1.304 MJ
Weight	48 g
Conformity marking	CE

### Environmental requirements

Ambient temperature (operation)	0 ... +55 °C
Surrounding air temperature (storage)	-25 ... +85 °C
Protection type	IP20
Pollution degree (5)	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 <sub>2</sub> S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO <sub>2</sub> contaminant concentration at a relative humidity 75 %	25 ppm

### Commercial data

Product Group	15 (Remote I/O)
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 Stück
Packaging type	Box
Country of origin VKOrg Germany	DE
GTIN	4045454569105
Customs tariff number VKOrg Germany	85389099990

### Approvals and certificates

#### Ex-Approvals



Approval	Standard	Certificate name
ATEX TUEV Nord Cert GmbH	EN 60079-0	
CCCEX CQST/CNEX	CNCA-C23-01	2020312310000215 (Ex nA IIC T4 Gc)
EAC Brjansker Zertifizierungsstelle	TP TC 012/2011	EAC RU C-DE.AM02. B.00163/19 (2Ex nA IIC T4 Gc X)
IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX_TUN_14.0035_X (Ex ec IIC T4 Gc)
INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079-0	BR-Ex_TÜV 12.1297 X
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1

#### Country specific Approvals



Approval	Standard	Certificate name
EAC Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC RU C-DE.AM02. B.00087/19
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-CTM750

**UL-Approvals**



Approval	Standard	Certificate name
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.1

**Downloads**

**Environmental Product Compliance**

Compliance Search
Environmental Product Compliance 750-638 <a href="#">↓</a>

**Documentation**

Manual			
System Manual WAGO I/O System 750 / 753	V 3.1.0 11.05.2022	pdf 8495.90 KB	<a href="#">↓</a>
System Manual Series 750/753			<a href="#">↓</a>
2-channel up/down counter	V 1.0.3	pdf 301.91 KB	<a href="#">↓</a>

System Description			
750/753 Series I/O-System – General Product Information		pdf 953.35 KB	<a href="#">↓</a>
Overview on WAGO-I/O-SYSTEM 750 approvals		pdf 770.48 KB	<a href="#">↓</a>
Use in Hazardous Environments	V 1.0.0	pdf 1007.06 KB	<a href="#">↓</a>

Additional Information			
Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 259.56 KB	<a href="#">↓</a>

Bid Text			
750-638	19.02.2019	xml 3.96 KB	<a href="#">↓</a>
750-638	09.10.2017	doc 25.00 KB	<a href="#">↓</a>

**CAD/CAE-Data**

CAD data
2D/3D Models 750-638 <a href="#">↓</a>

CAE data			
EPLAN Data Portal 750-638			<a href="#">↓</a>
WSCAD Universe 750-638			<a href="#">↓</a>
ZUKEN Portal 750-638			<a href="#">↓</a>



Device Files

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

Subject to changes. Please also observe the further product documentation!

Current addresses can be found at: [www.wago.com](http://www.wago.com)