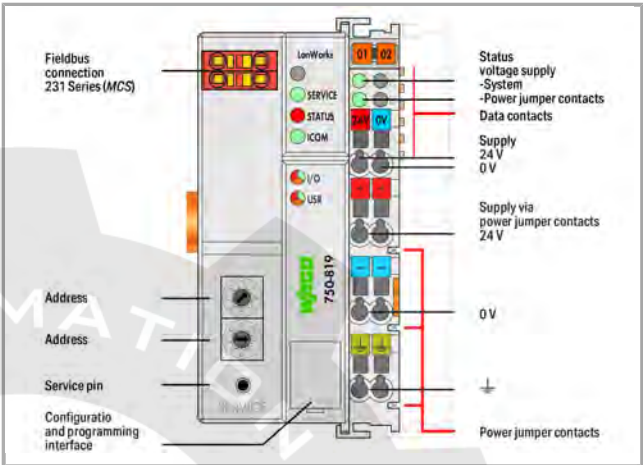




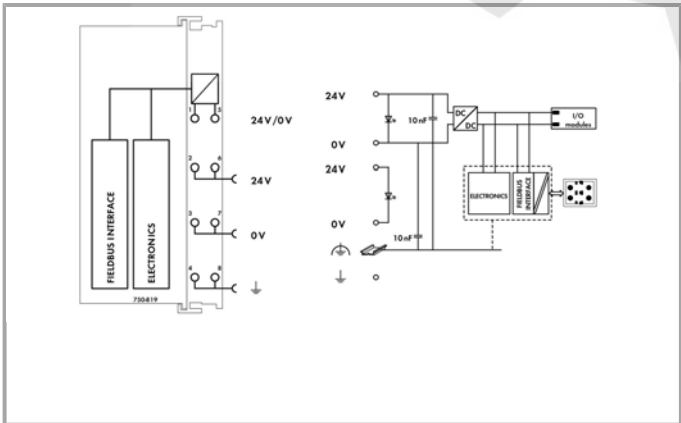
750-819



RoHS
Compliant

BOMcheck.net

Color:



Item description



The LONWORKS[®] PLC is an expansion for the WAGO-I/O-SYSTEM.

Programming of the application is done in accordance with IEC 61131-3. The programmer can access all fieldbus and I/O data.

Features and applications:

In addition to the Neuron chip, the LONWORKS[®] controller also has a host processor (40 MHz) that can be programmed via WAGO-I/O-PRO.

All available types of modules up to 248 digital or 124 analog input/output channels as well as modules with special functions can be addressed and handled using the program generated by WAGO-I/O-PRO.

The Neuron chip connection is made through IEC-61131-3 variables with special addresses. These can be imported via LNS[™]-compliant PRIO LNS plug-in and assigned to a maximum of 52 network variables.

To each of these network variables any SNVT can be assigned.

The PRIO LNS plug-in supports all available SNVTs from the LonMark[®] SNVT Master List (1-31 bytes in length).

Network variables can be assigned to any SNVTs, ensuring the best possible interoperability with LONMARK-compliant products of other manufacturers.

Note:

LON[®], LONMARK[®], LONWORKS[®] and Echelon[®] are registered trademarks of Echelon Corporation. LNS[™] is a trademark of Echelon Corporation. TOPLON[®] is a registered trademark of

Data

Technical Data

Visualization	without
Programming languages per IEC 61131-3	Instruction List (IL) Ladder Diagram (LD) Function Block Diagram (FBD), Continuous Function Chart (CFC) Structured Text (ST) Sequential Function Chart (SFC)
Programming environment	WAGO-I/O-PRO V2.3 (based on CODESYS V2.3)
Baud rate	-
Fieldbus segment length max.	2700 m; 500 m (free topology) 2700 m (bus-topology)
Transmission medium (communication/fieldbus)	Twisted pair - FTT
Topology	acc. to LON specification
Number of fieldbus nodes on the master max.	127
Program memory	128 kByte
Data memory	64 kByte
Software non-volatile memory	7 Kbytes
Number of modules per node max.	62
System supply voltage	

	DC 24 V(-15 ... +20 %); via wiring level (CAGE CLAMP® connection)
Input current typ. at rated load (24 V)	500 mA
Efficiency of the power supply (typ.) at nominal load (24 V)	87 %
Current consumption, system supply (5 V)	300 mA
Total current for system supply	1700 mA
Field supply voltage	DC 24 V (-15 ... +20 %); via power jumper contacts
Current carrying capacity of the power jumper contacts	10 A
Number of outgoing power jumper contacts	3
Isolation	500 V system/supply

Connection data

Connection technology: communication/fieldbus	LonWorks: 1 x 2-pole male connector
Connection technology: system supply	2 x CAGE CLAMP®
Connection technology: field supply	6 x CAGE CLAMP®
Connection type (1)	System/field supply
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch
Connection technology: Device configuration	1 x 4-pole male connector

Geometrical Data

Width	50.5 mm / 1.988 inch
Height	71.1 mm / 2.799 inch
Height from upper-edge of DIN-35 rail	63.9 mm / 2.516 inch
Depth	100 mm / 3.937 inch

Mechanical data

Weight	194.517 g
Color	light gray
Housing material	Polycarbonate, polyamide 6.6
Conformity marking	1

Environmental Requirements

Surrounding air (operating) temperature	0 ... 55 °C
Surrounding air (storage) temperature	-40 ... 85 °C
Protection class	IP20
Degree of pollution (5)	2 per IEC 61131-2
Operating altitude	without temperature derating: 0 ... 2000 m; with temperature derating: 2000 ... 5000 m (0.5 K/100 m); max.: 5000 m
Relative air humidity (no condensation)	95 %
Mounting position	any

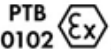
Type of mounting	DIN-35 rail
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	acc. to EN 61000-6-2
EMC emission of interference	acc. to EN 61000-6-4
Exposure to pollutants	Per IEC 60068-2-42 and IEC 60068-2-43
Permissible H ₂ S contaminant 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 (Remote I/O)
Country of origin	DE
GTIN	4045454527037
Customs Tariff No.	85371091990

Approvals / Certificates

Ex-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ATEX TUEV Nord Cert GmbH	EN 60079-0	TÜV 07 ATEX 554086 X en.
	INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079	BR- Ex_TÜV 12.1297 X
	TUEV Nord TUEV Nord Cert GmbH	IEC 60079-0	IECEx TUN 09.0001 X
	UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	ANSI/ISA 12.12.01	E198726 Sec.1

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	KC National Radio Research Agency	Article 58-2, Clause 3	MSIP- REM-W43- PFC750

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Netherlands B.V. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.1

Compatible products

Carrier rail

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

system box

**Item no.: 850-804**

IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 4 x M20, 16 x M16, 28 x M12 cable grip

850-804

**Item no.: 850-804/000-001**

IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 2 x M20, 13 x M16, 32 x M12 cable grip

/000-001

850-804

**Item no.: 850-805**

IP65 enclosure; Stainless steel; WxHxD (600x123x200 mm); 4 x M20, 19 x M16, 67 x M12 cable grip

850-805

**Item no.: 850-814/002-000**

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate

/002-000

850-814

**Item no.: 850-815/002-000**

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate

/002-000

850-815

**Item no.: 850-816/002-000**

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate

/002-000

850-816

**Item no.: 850-817/002-000**

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate

/002-000

850-817

**Item no.: 850-825**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20

850-825

**Item no.: 850-826**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

850-826

**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

/002-000

850-826

**Item no.: 850-827**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip

850-827

**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

/002-000

850-827

**Item no.: 850-828**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip

850-828

**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

/002-000

850-828

**Item no.: 850-834**

IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20

850-834

**Item no.: 850-835**

IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

850-835

Item no.: 850-836



IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip

850-836

General accessories



Item no.: 750-921
Bluetooth® Adapter

750-921



Item no.: 750-923
Configuration cable; USB connector; Length: 2.5 m

750-923



Item no.: 750-923/000-001
Configuration cable; USB connector; Length: 5 m

750-923

/000-001

Marking accessories



Item no.: 2009-145
Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

2009-145



Item no.: 2009-145/000-002
Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

2009-145

/000-002



Item no.: 2009-145/000-005
Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

2009-145

/000-005



Item no.: 2009-145/000-006
Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

2009-145

/000-006



Item no.: 2009-145/000-007
Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

2009-145

/000-007



Item no.: 2009-145/000-012
Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

2009-145

/000-012



Item no.: 2009-145/000-023
Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

2009-145

/000-023



Item no.: 2009-145/000-024
Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

2009-145

/000-024



Item no.: 248-501
Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card

248-501



Item no.: 248-501/000-002
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

248-501

/000-002



Item no.: 248-501/000-005
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

248-501

/000-005

**Item no.: 248-501/000-006**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-006

248-501

**Item no.: 248-501/000-007**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-007

248-501

**Item no.: 248-501/000-012**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-012

248-501

**Item no.: 248-501/000-017**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-017

248-501

**Item no.: 248-501/000-023**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-023

248-501

**Item no.: 248-501/000-024**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-024

248-501

**Item no.: 750-100**

Marker card; as a DIN A4 sheet; plain

750-100

**Item no.: 750-103**

Group marker carrier

750-103

**Item no.: 750-106**

Group marker carrier

750-106

shield connection**Item no.: 790-108**

Shield clamping saddle; 11 mm wide; diameter of compatible conductor

790-108

**Item no.: 790-116**

Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm

790-116

**Item no.: 790-124**

Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm

790-124

**Item no.: 790-140**

Shield clamping saddle; diameter of compatible conductor

790-140

**Item no.: 790-208**

Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm

790-208

**Item no.: 790-216**

Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm

790-216

**Item no.: 790-220**

Shield clamping saddle; 30 mm wide; 6 ... 20 mm

790-220

software**Item no.: 759-333**

WAGO-I/O-PRO

759-333



Item no.: 759-333/000-923
WAGO-I/O-PRO; USB-Set

759-333

759-333



Item no.: 759-911
WAGO-I/O-PRO; CD

759-911

Downloads

Documentation

Manual

LonWorks® fieldbus coupler / LONWORKS® programmable fieldbus controller FTT, digital and analog signals 160 kB / 78 kbps, digital and analog signals	V 2.1.1	pdf 1.9 MB	Download
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Bid Text

750-819 IO, Controller	Apr 4, 2012	doc 28.2 kB	Download
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Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 265.8 kB	Download
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System Description

Design Notes Basic conditions and recommendations for higher operational safety	V 2.0.0	pdf 1.5 MB	Download
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Use in Hazardous Environments Term definition, marking and installation regulations	V 1.0.0	pdf 1.0 MB	Download
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Application Notes

Application Note CoDeSys 2.3

Application examples of the LonWorks 750-819 fieldbus controller The implementation of several practical LON applications using the 750-819 fieldbus controller is described in this document.	Mar 20, 2014	PDF 3.5 MB	Download
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Libraries

Plugin

WAGO TOPLON® PRIO for LNS 3 databases	1.60.0000	zip 9.5 MB	Download
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Library



Condition monitoring with 750-645	V1.0.1	zip 112.8 kB	Download
The WagoLib_VIO.lib library provides a function block which allows to configure the module 750-645.			

Control DC motor with 750-636	V1.0.0	zip 150.5 kB	Download
The MC1_DC_Control.lib library provides a function block which allows to configure the module 750-636 as well as to operate a DC motor.			

Engineering-Software

Configuration and Commissioning Software

WAGO-IO-PRO Demo-Version (759-912) / Serie 750, 758 und 762	2.3.9.55 Jul 3, 2015	zip 108.3 MB	Download
WAGO Extension Setting / 750 Series	2.0.2 Mar 9, 2011	zip 5.4 MB	Download

Runtime Software

Firmware

Firmware: 750-819 Controller LonWorks®	10 Jun 26, 2018	zip 420.8 kB	Download
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CAD/CAE - Smart Data

CAD data

3D Download 750-819	URL	Download
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Device Files

Device Driver

WAGO TOPLON® Neuron-C Library		zip 191.2 kB	Download
WAGO USB Service Cable Driver / 750 and 857 Series 759-923	6.5.3.0 Sep 10, 2014	zip 4.8 MB	Download

Product family

Controller 750

[Learn more about the product family.](#)

[Show all products from the family](#)



Subject to changes.
