Data Sheet | Item Number: 750-832

Controller BACnet/IP; 4th generation; 2 x ETHERNET, SD Card Slot

https://www.wago.com/750-832

The 750-832 BACnet/IP Controller connects the WAGO I/O System to the BACnet protocol and supports the B-BC BACnet device profile per DIN EN ISO 16484-5. It communicates with other BACnet devices via BACnet/IP.

The controller provides the three following functionalities:
1. Native server: For each channel, appropriate BACnet objects are generated automatically for the digital and analog I/O modules that are connected to the controller.
2. Application server: Other supported BACnet objects can be created via IEC 61131-3 programming environment and made available to a BACnet network.
3. Application client: Using the client functionality, objects and their properties can be accessed by other BACnet devices.

Two ETHERNET interfaces and an integrated switch allow the fieldbus to be wired in a line topology, eliminating the need for additional network devices, such as switches or hubs. Both interfaces support autonegotiation and Auto-MDI(X).
The DIP switch configures the last byte of the IP address and may be used for IP address assignment. An integrated Webserver provides configuration options to the user, while displaying the controller's status information.
The IEC 61131-3 programmable controller is multitasking-capable and features a capacitor-backed RTC. A data memory of 8 MB is available.
The 750-832 Controller is equipped with a removable memory card slot. A memory card can be used to transfer device parameters or files (e.g., boot files) from one controller to another. The memory card can be accessed via FTP and be used as an additional drive.
The controller can process a maximum of 1000 simple BACnet objects. The actual number that can be implemented in the project can be reduced with complex object types.
Start-up and configuration of the BACnet networks is performed using the WAGO BACnet Configurator's Windows software.

Technical data

Communication	BACnet/IP Modbus (TCP, UDP)
ETHERNET protocols	HTTP(S) BootP DHCP DNS SNTP FTP(S) SNMP
Visualization	Web-Visu
CPU	32 bits
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)
Configuration options	WAGO-I/O-*CHECK* BACnet Configurator Web-Based Management
Baud rate (communication/fieldbus 1)	10/100 Mbit/s
Baud rate	10/100 Mbit/s
Transmission medium (communication/fieldbus)	Twisted pair S-UTP; 100 Ω; Cat. 5; 100 m maximum cable length
Transmission performance	Class D per EN 50173
Program memory	8 MB
Data memory	8 MB
Non-volatile software memory	32 KB
Type of memory card	SD and SDHC up to 32 GB (all guaranteed properties only valid with WAGO's memory card)
Memory card slot	Push-push mechanism; cover lid (sealable)
Number of modules per node (max.)	250
Number of modules without a bus extension (max.)	64
Input and output process image (fieldbus) max.	1020 words/1020 words
Device-specific	BACnet device profile: B-BC (BACnet building controller); BACnet revision: 12

Version 20.02.2024

Technical data

Indicators	LED (LINK/ACT) green: Network connection via ports 1 … 2; LED (MS/BT, NS) red/green: Status of node/BACnet, network; LED (I/O, USR) red/green/orange: Local data bus status, status programmable by user; LED (A, B) green: Status of system power supply, field supply
Supply voltage (system)	24 VDC (-25 … +30 %); via pluggable connector (CAGE CLAMP® connection)
Input current (typ.) at nominal load (24 V)	500 mA
Power supply efficiency (typ.) at nominal load (24 V)	90 %
Current consumption (5 V system supply)	440 mA
Total current (system supply)	1700 mA
Supply voltage (field)	24 VDC (-25 … +30 %); via power jumper contacts
Current carrying capacity (power jumper contacts)	10 A
Number of outgoing power jumper contacts	3
Isolation	500 V system/field

Connection data

Connection technology: communication/fieldbus	BACnet/IP: 2 x RJ-45; Modbus (TCP, UDP): 2 x RJ-45
Connection technology: system supply	2 x CAGE CLAMP®
Connection technology: field supply	6 x CAGE CLAMP®
Connection type 1	System/field supply
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
Connection technology: device configuration	1 x Male connector; 4-pole

Mechanical data

Weight	151.8 g
Housing material	Polycarbonate; polyamide 6.6
Conformity marking	CE

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
EAC Brjansker Zertifizierungs-stelle	TP TC 020/2011	EAC RU C-DE.AM02.B.00087/19
EAC Brjansker Zertifizierungs-stelle	TP TC 012/2011	EAC RU C-DE.AZ58.B.2173-21 e (2Ex e IIC T4 Gc X)
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-PFC750
UL Underwriters Laboratories Inc. (ORDINARY LOCATI-ONS)	-	E175199

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

Approval	Standard	Certificate Name
BSH Bundesamt fuer See- schifffahrt und Hydrogra- phie	-	1104
DNV DNV GL SE	DNV-CG-0339,Aug.2021	TAA0000194

Approvals for hazardous areas

Approval	Standard	Certificate Name
ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV14ATEX148929X (II 3 G Ex ec IIC T4 Gc)
CCCEx CQST/CNEx	CNCA-C23-01	2020312310000213 (Ex ec IIC T4 Gc)
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	TÜV 12.1297 X
UKEx WAGO GmbH & Co. KG	EN 60079-0	UKCA_WA GO22UKEX003X_ec
UL Underwriters Laboratories Inc. (HAZARDOUS LOCA- TIONS)	UL 121201	E198726 Sec.1

Protocol and fieldbus specific certificates

Approval	Standard	Certificate Name
BACnet WSP Cert	-	Listing information BTL-30464

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

Current addresses can be found at:: www.wago.com