

# NETWORK & WIRELESS

## LONWORKS/BACNET AND UNIVERSAL GATEWAYS LGATE-9XX SERIES



**LOYTEC**

### DESCRIPTION

LGATE-900 is a CEA-709/BACnet gateway which allows seamless integration of systems using both communication standards by mapping CEA-709 network variables (NVs) to standard BACnet server objects. LGATE-900 is fully compliant with the standards CEA-709, CEA-852, and EN 14908 (LonMark system) as well as ASHRAE 135-2008 and ISO 16484-5. Analog, binary, and multistate BACnet objects (input/output) are mapped to NVs based on the CEN/TS 15231:2005 standard. BACnet properties are automatically configured with default values from the SNVT self-description. Scalar NVs are mapped to one BACnet object each. Structured NVs are mapped to several BACnet object, one for each member (members can be selected individually). Each LGATE-900 can handle up to 750 BACnet Objects. Several devices can be installed in a network at the same time.

LGATE-95x allows a smooth integration between LonMark Systems, BACnet networks, KNX networks, Modbus devices, M-Bus devices as well as ZigBee PRO wireless devices. Network variables are mapped to binary, analog, or multistate objects (input, output, value) according to the CEN/TS 15231:2005 standard. Data points can be manually or automatically generated across multiple protocols. In addition to analog, binary and multistate objects LGATE-95x supports alarming, scheduling and trending. They can be either connected through their Ethernet/IP ports to LonMark IP-852, BACnet/IP, KNXnet/IP and Modbus TCP simultaneously or to TP/FT-10, BACnet MS/TP channels, Modbus RTU and KNX TP1 respectively.

### FEATURES

- Fully compliant with ANSI/ASHRAE 135-2008 and ISO 16484-5 (BACnet)
- Fully compliant with CEA-709, CEA-852 and EN 14908 (LON)
- Built-in Web server for device configuration
- Support alarming, scheduling and trending
- Network diagnostic LEDs (LGATE-900)
- 128x64 display with backlight (LGATE-95x)
- Local and remote access to information about device status and data points (LGATE-95x)
- DIN rail mountable

**NEW!**

LGATE 900

LGATE 95x



### SPECIFICATIONS

<b>Supply Voltage</b>	
<b>LGATE-900</b>	12 to 24 VAC / 50-60 Hz, 12-35 VDC
<b>LGATE-95x</b>	24 VAC / 50-60 Hz, 24 VDC
<b>Supply Watts</b>	
<b>LGATE-900</b>	3 Watts
<b>LGATE-95x</b>	2.5 Watts
<b>Communication</b>	
<b>LGATE-900</b>	Type CEA-709, BACnet, OPC XML-DA
<b>LGATE-95x</b>	Type CEA-709, BACnet, Modbus, OPC XML-DA, KNX, M-Bus
<b>Channels</b>	
<b>LGATE-900</b>	1x Ethernet (100Base-T) Lonmark IP-852, BACnet/IP, HTTP, FTP, 1x TP/FT-10, 1x BACnet MS/TP
<b>LGATE-95x</b>	2x Ethernet (100Base-T), Lonmark IP-852, BACnet/IP, HTTP, FTP, KNXnet/IP, Modbus TCP (Master or Slave); 1x TP/FT-10 (Lonmark System); 1x BACnet MS/TP; 1x Modbus RTU (Master or Slave); 1x EXT (alternatively for M-Bus Master EN13757-3 with L-MBUS20/80, KNX TP1 with LKNX-300)
<b>Dimensions</b>	
<b>LGATE-900</b>	4.21"W x 3.94"H x 2.36"D (10.7 x 10.0 x 6.0 cm)
<b>LGATE-95x</b>	6.26"W x 3.94"H x 2.95"D (15.9 x 10.0 x 7.5 cm)
<b>Operating Temperature</b>	32° to 112°F (0° to 50°C)
<b>Operating Humidity</b>	0-90% RH non-condensing
<b>Weight</b>	
<b>LGATE-900</b>	0.55 lbs (0.25 kg)
<b>LGATE-95x</b>	0.77 lbs (0.35 kg)
<b>Approvals</b>	CE, FCC
<b>Warranty</b>	2 years

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NETWORK & WIRELESS

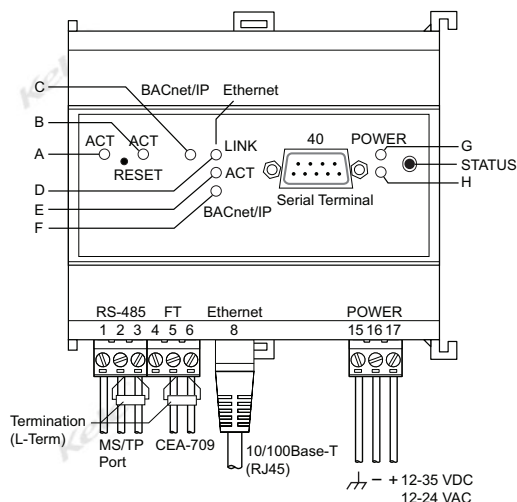
NEW!

# NETWORK & WIRELESS

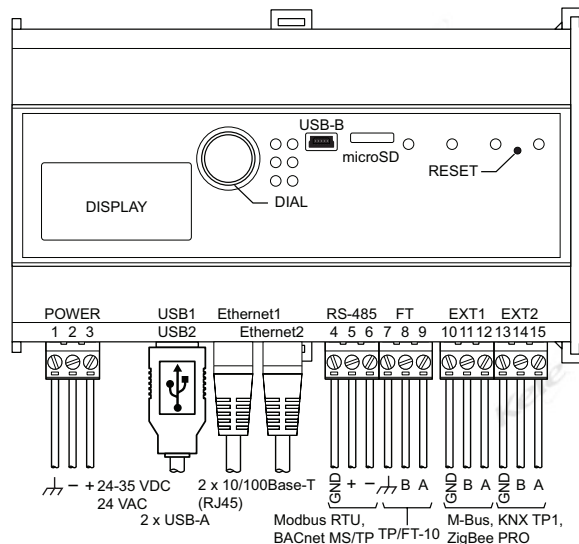
## BACNET AND UNIVERSAL GATEWAYS LGATE-9XX SERIES

### WIRING

#### LGATE 900



#### LGATE 95x



Connectors	
MS/TP	1 Input GND 2 Input + (B) non-inverting input 3 Input - (A) inverting input
CEA-709	4 Input EARTH GND 5 Input B 6 Input A
Ethernet	8 10/100Base-T (RJ45)
POWER	15 Power supply input EARTH GND 16 Power supply input MINUS 17 Power supply input PLUS <b>Do NOT connect to EARTH GND</b>
SERIAL	40 EIA-232 (DB9 male)

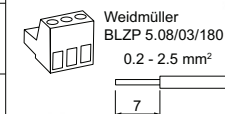
Status LEDs	
A Green flashing fast	Traffic on MS/TP port
B Green flashing fast	Traffic on CEA-709 port
C Green flashing at 1 Hz	Port not commissioned
Red permanent	CEA-709 port damaged
Red flashing fast	Traffic overload on port
C Green	IP port is fully functional
Yellow	IP port functional but config. is not up-to-date
Red	IP port is non-functional
Flashing at 1 Hz	IP port is not commissioned
OFF	IP port is not active
D Green	Ethernet link
E Green flashing	Ethernet traffic
F Green	BACnet IP enabled
G Green	Power
H/OFF	Normal operation

**NOTE:** If terminal 1 is not connected make a short between terminal 15 and 16, and connect to EARTH GND.

Connectors	
POWER	1 Power supply input EARTH GND 2 Power supply input MINUS Can be connected to EARTH GND 3 Power supply input PLUS <b>Do NOT connect to EARTH GND</b>
Modbus BACnet MS/TP	4 Input GND 5 Input + 6 Input -
TP/FT-10	7 Input EARTH GND 8 Input B 9 Input A
EXT1 M-Bus, KNX TP1 ZigBee	10 Input GND 11 Input B 12 Input A
EXT2 M-Bus, KNX TP1 ZigBee	13 Input GND 14 Input B 15 Input A

Connectors	
USB1	USB-A USB Host
USB2	USB-A USB Host
USB-B	USB-B PC
Ethernet1	RJ45 10/100Base-T
Ethernet2	RJ45 10/100Base-T
microSD	slot microSD card max. 2 GB

Buttons	
RESET	Reset
DIAL	Turn-and-Push Dial



### ORDERING INFORMATION

**MODEL**  
LGATE-900  
LGATE-950  
LGATE-951

**DESCRIPTION**  
Lonworks to BACNET LGATE Gateway  
Universal LGATE Gateway with one ext. port  
Universal LGATE Gateway with two ext. ports