

L-VIS Touch Panel

✓ BACnet  
CEA-709

✓ Modbus  
M-Bus  
✓ OPC

LVIS-ME200/ME212/ME215/3ME15-Gx/3ME7-Gx

Datasheet #89017304



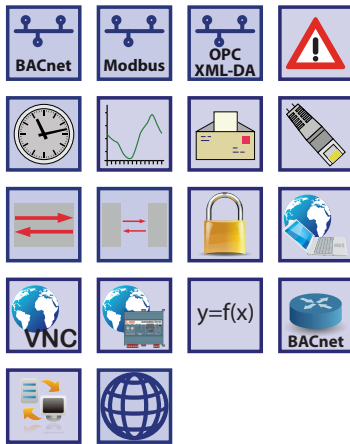
L-VIS Touch Panels for BACnet networks are ideally suited for visualization and operation of various applications in building automation. L-VIS Touch Panels visualize building systems, can be used as room operator panels, in hospital operation or isolation rooms, conference and reception areas. The fully customizable user screens can show dynamic pages that are easy to navigate. L-VIS Touch Panels make use of an extremely low power embedded controller platform utilizing an embedded operating system. This makes L-VIS resistant against problems when re-booting after power outage and also against any viruses.

L-VIS impresses with its timeless design, harmonic integration into modern and historical architecture, and with its extremely user friendly concept. The shallow installation depth and low thermal power loss allow mounting in almost any location.

**Different Sizes**

L-VIS Touch Panels are available in the following variations:

LVIS-ME200	5.7" Touch Display	320 x 240	256 colors
	Aluminium frame with anodized finish		
LVIS-3ME7-Gx	7" Touch Display	800 x 480	256 k colors
	Frameless glass front and capacitive touch		
LVIS-ME212	12.1" Touch Display	800 x 600	65 536 colors
	Aluminium frame with anodized finish		
LVIS-ME215	15" Touch Display	1024 x 768	65 536 colors
	Aluminium frame with anodized finish		
LVIS-3ME15-Gx	15" Touch Display	1024 x 768	256 k colors
	Frameless glass front and capacitive touch		



**Dynamic Graphical Pages**

The graphical pages may consist of multiple dynamic graphical controls that show the current plant status in real time. It is also possible to access decentralized schedules, alarm servers, or trends. The graphical projects are designed with the L-VIS/L-WEB configuration tool free of charge. Without any know-how in HTML or Java, user specific graphical pages can be created. Dynamic information is shown through value or text controls, changing symbols, bar charts, trend views, alarm and event lists, or schedule controls. The L-VIS/L-WEB configuration tool allows for using most of the pixel graphic formats (GIF, JPG, BMP, TIF, PNG) or vector graphics (SVG).

**Playback of Audio Files and Streams**

The L-VIS Touch Panel supports the playback of stereo MP3, WAV, and MP3 streams (for example webradio). The playback will be started or stopped by the respective action object. The action object is linked to one of the available audio files or to the URL of an MP3 stream. When accessing a playback via L-WEB, it will be executed locally on the client.

**Automatic Page Generation**

Pages including data point names and values, alarm views, schedules, or trends can be created automatically by the L-VIS/L-WEB configuration tool. This significantly reduces engineering time and cost.

**Connectivity and Data Points**

The L-VIS Touch Panels support connectivity to BACnet/IP and BACnet MS/TP and implement the BACnet Building Controller (B-BC) profile. They include a fully featured built-in BACnet/IP to MS/TP router with BBMD and slave proxy functionality. In addition, the L-VIS Touch Panels provide connectivity to Modbus TCP via Ethernet/IP and to Modbus RTU via RS-485.

# LVIS-ME200/ME212/ME215/3ME15-Gx/3ME7-Gx

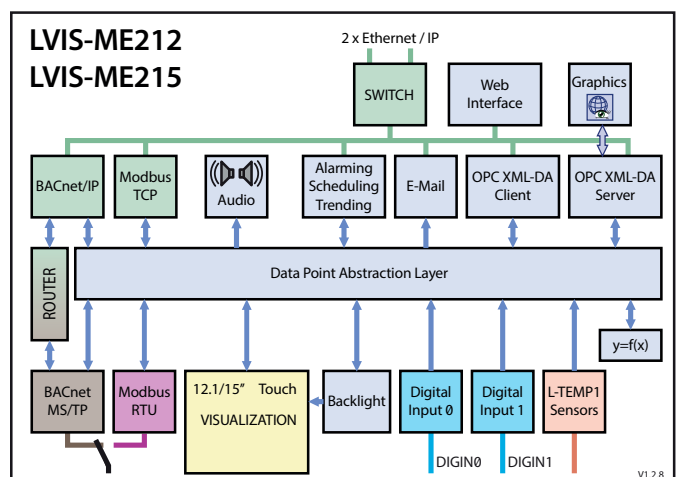
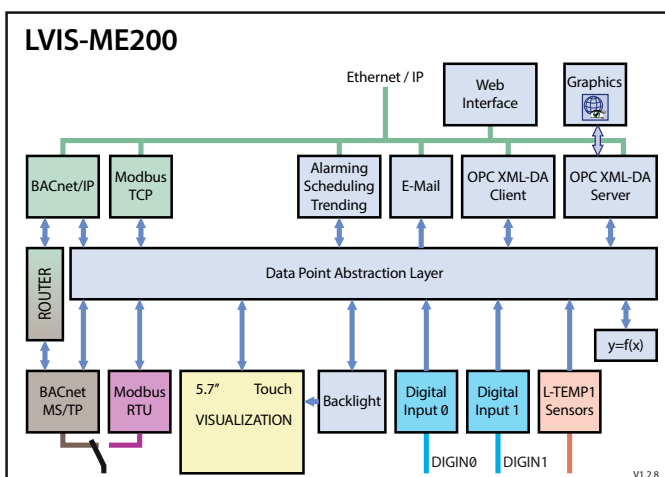
Math objects can calculate any kind of formula using data points available on the device. The resulting data point value can then be either shown on the page or provided via a BACnet object. All BACnet server objects are automatically mapped to OPC XML-DA data points that can be accessed via Web services.

The L-VIS devices provide fully featured AST™ functionality (Alarming, Scheduling, and Trending) and can be integrated perfectly into the L-WEB System.

The LVIS-ME212/ME215/3ME15-Gx/3ME7-Gx devices are equipped with two Ethernet ports including a built-in Ethernet switch. This allows for building a daisy chained line topology of up to 20 devices, which reduces costs for network installation. Dual Ethernet port devices also allow the setup of a redundant Ethernet installation (ring topology), which increases reliability. The redundant Ethernet topology is enabled by the Rapid Spanning Tree Protocol (RSTP), which is supported by most managed switches.

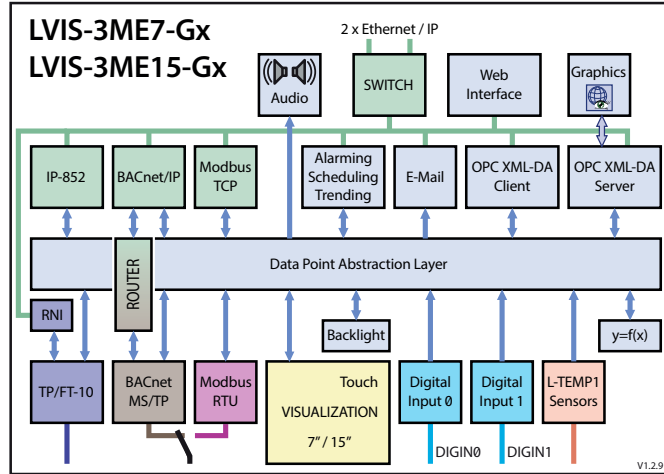
## Features

- High resolution TFT touch display with dimmable backlight
- Anodized aluminium front frame or frameless glass front and capacitive touch (LVIS-3ME15-Gx/LVIS-3ME7-Gx)
- Flush-mounting in combination with the mounting frame
- Stores customized graphical pages
- Visualization of customized graphical pages through built-in Touch Panel, LWEB-900 (building management) and LWEB-802/803
- Device configuration and graphical page creation with the L-VIS/L-WEB configuration tool free of charge
- Supports all popular graphic file formats such as BMP, ICO, JPEG, TIFF, PNG, MNG, GIF
- Support of SVG vector graphics
- Supports alpha blending
- Supports popular font types such as TrueType, Type-1, BDF, PCF, and OTF
- Supports Unicode text
- Built-in OPC XML-DA server
- Built-in OPC XML-DA client
- Alarming, Scheduling, and Trending (AST™)
- Event-driven e-mail notification
- Math objects to execute mathematical operations on data points
- Compliant with ANSI/ASHRAE-135-2008 and ISO 16484-5 standard
- Supports BACnet MS/TP and BACnet/IP
- BACnet Client Function (Write Property, Read Property, COV Subscription)
- BACnet Client Configuration with configuration tool (scan and EDE import)
- B-BC (BACnet Building Controller)
- Integrated BACnet/IP to BACnet MS/TP Router
- Modbus TCP and Modbus RTU (Master or Slave)
- Integrated web server for device configuration and monitoring data points
- Access to network statistics
- Configurable via Ethernet/IP
- Playback of audio files and streams (LVIS-ME21x only)



L-VIS Touch Panel

LVIS-ME200/ME212/ME215/3ME15-Gx/3ME7-Gx



Specifications 5.7", 7"

Type	LVIS-ME200	LVIS-3ME7-Gx
Screen size	5.7" (145 mm)	7" (179 mm)
Dimensions (mm)	210 x 164 x 63 (LxW x H), DIM001	223.5 x 162 x 65 (L x W x H), DIM035
Dimensions cut-out (mm)	180 x 150 x 57 (LxW x H)	195 x 143 x 61 (L x W x H)
Display resolution	320 x 240, 256 colors	800 x 480, 256 k colors
Interfaces	1 x Ethernet (100Base-T) OPC XML-DA (server, client), BACnet/IP, HTTP, FTP, SMTP, NTP, VNC, Modbus TCP (Master or Slave) 1 x RS-485 (ANSI TIA/EIA-485) BACnet MS/TP or Modbus RTU (Master or Slave) 2 x Digital Input 1 x Digital interface for up to 4 L-TEMP1 sensors	2 x Ethernet (100Base-T), Switch OPC XML-DA (server, client) BACnet/IP, LonMark IP-852, HTTP, FTP, HTTPS, SMTP, NTP, VNC Modbus TCP (Master or Slave) 1 x TP/FT-10 1 x RS-485 (ANSI TIA/EIA-485) BACnet MS/TP or Modbus RTU (Master or Slave) 2 x Digital Input 1 x Digital interface for up to 4 L-TEMP1 sensors 2 x USB-A, 1 x USB-B (PC) speaker, audio output
Power supply	20-35 VDC / 24 VAC ±10 % typ. 3 W, backlight on: 8 W	24 VDC ±10 % backlight on: 7 W
Operating conditions	+10 °C to 40 °C, 10-90 % RH @ 50 °C, non condensing	
Degree of protection	Front: IP54 / back: IP10	
Tools	L-VIS/L-WEB Configurator	

Resource limits 5.7", 7"

OPC data points	2000	10000
VNC clients	16	16
BACnet server objects	512	512
BACnet calendar objects	25	25
BACnet scheduler objects	100 (64 data points per object)	100 (64 data points per object)
BACnet notification classes	32	32
E-mail templates	100	100
Math objects	500	2000
Alarm logs	10	10
Trend logs	100 (390 000 entries, ≈ 6 MB)	512 (4 000 000 entries, ≈ 60 MB)
Total trended data points	256	512
Connections (Local/Global)	1 000/250	2 000/250
Number of L-WEB clients	15 (simultaneously)	32 (simultaneously)

## LVIS-ME200/ME212/ME215/3ME15-Gx/3ME7-Gx

Specifications 12.1", 15"		
Type	LVIS-ME212	LVIS-ME215/3ME15-Gx
Screen size	12.1" (307 mm)	15" (381 mm)
Dimensions (mm)	329 x 268.3 x 65 (L x W x H), DIM002	394 x 318 x 65 (L x W x H), DIM003
Dimensions cut-out (mm)	300 x 250 x 61 (L x W x H)	355 x 295 x 61 (L x W x H)
Display resolution	800 x 600, 65 536 colors	1024 x 768, 65 536 colors
Interfaces	2 x Ethernet (100Base-T), Switch, OPC XML-DA (server, client), BACnet/IP, HTTP, FTP, HTTPS, SMTP, NTP, VNC, Modbus TCP (Master or Slave) 1 x RS-485 (ANSI TIA/EIA-485) BACnet MS/TP or Modbus RTU (Master or Slave) 2 x Digital Input 1 x Digital interface for up to 4 L-TEMP1 sensors 2 x USB-A, 1 x USB-B (PC) speaker, audio output	2 x Ethernet (100Base-T), Switch, OPC XML-DA (server, client), BACnet/IP, HTTP, FTP, HTTPS, SMTP, NTP, VNC, Modbus TCP (Master or Slave) 1 x RS-485 (ANSI TIA/EIA-485) BACnet MS/TP or Modbus RTU (Master or Slave) 2 x Digital Input 1 x Digital interface for up to 4 L-TEMP1 sensors 1 x USB-A, 1 x USB-B (PC) speaker, audio output
Power supply	24 VDC $\pm$ 10 % or 85-240 VAC 2.5 W, backlight on: 13 W	24 VDC $\pm$ 10 % or 85-240 VAC backlight on: 11 W
Operating conditions	+10 °C to 40 °C, 10-90 % RH @ 50 °C, non condensing	
Degree of protection	Front: IP54 / back: IP10	
Tools	L-VIS/L-WEB Configurator	
Resource limits 12.1", 15"		
OPC data points	10 000	10 000
VNC clients	16	16
BACnet server objects	512	512
BACnet calendar objects	25	25
BACnet scheduler objects	100 (64 data points per object)	100 (64 data points per object)
BACnet notification classes	32	32
E-mail templates	100	100
Math objects	2 000	2 000
Alarm logs	10	10
Trend logs	512 (4 000 000 entries, $\approx$ 60 MB)	512 (4 000 000 entries, $\approx$ 60 MB)
Total trended data points	512	512
Connections (Local/Global)	2 000/250	2 000/250
Number of L-WEB clients	32 (simultaneously)	32 (simultaneously)

## L-VIS Touch Panel

## LVIS-ME200/ME212/ME215/3ME15-Gx/3ME7-Gx

Order number	Product description
LVIS-ME200	BACnet Touch Panel with 5.7" display, B-BC
LVIS-3ME7-G1	CEA-709, BACnet, and Modbus Touch Panel 7" (frameless glass front and capacitive touch), silver
LVIS-3ME7-G2	CEA-709, BACnet, and Modbus Touch Panel 7" (frameless glass front and capacitive touch), black
LVIS-ME212	BACnet Touch Panel with 12.1" display, B-BC
LVIS-ME215	BACnet Touch Panel with 15" display, B-BC
LVIS-3ME15-G1	CEA-709, BACnet, and Modbus Touch Panel 15" (frameless glass front and capacitive touch), silver
LVIS-3ME15-G2	CEA-709, BACnet, and Modbus Touch Panel 15" (frameless glass front and capacitive touch), black
LVIS-3ME15-G3	CEA-709, BACnet, and Modbus Touch Panel 15" (frameless glass front and capacitive touch), white
LVIS-FRAME1	Mounting frame for 5.7" Touch Panels
LVIS-FRAME7	Mounting frame for 7" Touch Panels
LVIS-FRAME12	Mounting frame for 12.1" Touch Panels
LVIS-FRAME15	Mounting frame for 15" Touch Panels
L-TEMP1	External temperature sensor