Date: Jan 3, 2013
Vendor Name: LOYTEC electronics GmbH
Product Name: BACnet LC touch panel
Product Model Number: LVIS-ME2xx
Applications Software Version: N/A
Firmware Revision: 4.5.x
BACnet Protocol Revision: 135-2010 (1.7)

Product Description:

This product is a BACnet enabled, freely configurable LC touch panel. It allows visualizing and changing the values of BACnet properties on the high resolution color LC touch display. The touch panel offers easy navigation through the menu structure and is also used to set temperatures, select light scenarios, move sun blinds, etc. The L-VIS configuration tool supplied with the unit is used to create the menu structure and design graphical pages, which can be downloaded into L-VIS via the network connection. The LC touch panel shows numbers, text, bar graphs, symbols, graphics, trend logs, and many other items in a clear way.

Available models:	LVIS-ME200	5.7”	320x240 touch display
	LVIS-ME212	12.1”	800x600 touch display
	LVIS-ME215	15”	1024x768 touch display

BACnet Standardized Device Profile (Annex L):

BACnet Advanced Application Controller (B-AAC)
Note that this device can also act as a router, BBMD, and slave proxy when connected to BACnet IP and MS/TP at the same time.

BACnet Interoperability Building Blocks Supported (Annex K):

Data Sharing – ReadProperty-A (DS-RP-A)
Data Sharing – ReadProperty-B (DS-RP-B)
Data Sharing – ReadPropertyMultiple-A (DS-RPM-A)
Data Sharing – ReadPropertyMultiple-B (DS-RPM-B)
Data Sharing – WriteProperty-A (DS-WP-A)
Data Sharing – WriteProperty-B (DS-WP-B)
Data Sharing – WritePropertyMultiple-A (DS-WPM-A)
Data Sharing – WritePropertyMultiple-B (DS-WPM-B)
Data Sharing – COV-A (DS-COV-A)
Data Sharing – COV-B (DS-COV-B)
Data Sharing – COVP-A (DS-COVP-A)
Data Sharing – COVP-B (DS-COVP-B)
Data Sharing – COV Unsolicited-B (DS-COVU-B)
Alarm and Event – Notification-A (AE-N-A)
Alarm and Event – Notification Internal-B (AE-N-I-B)
Alarm and Event – ACK-A (AE-ACK-A)
Alarm and Event – ACK-B (AE-ACK-B)
Alarm and Event – Alarm Summary-A (AE-ASUM-A)
Alarm and Event – Alarm Summary-B (AE-ASUM-B)
Alarm and Event – Alarm Enrollment Summary-A (AE-ESUM-A)
Alarm and Event – Alarm Enrollment Summary-B (AE-ESUM-B)
Alarm and Event – Alarm Information-A (AE-INFO-A)
Alarm and Event – Alarm Information-B (AE-INFO-B)
Scheduling – A (SCHED-A)
Scheduling – Internal-B (SCHED-I-B)
Scheduling – External-B (SCHED-E-B)
Trending – Viewing and Modifying Trends Internal-B (T-VMT-I-B)
Trending – Viewing and Modifying Trends External-B (T-VMT-E-B)
Trending – Automated Trend Retrieval-B (T-ATR-B)

Device Management – DynamicDeviceBinding-A (DM-DDB-A)
Device Management – DynamicDeviceBinding-B (DM-DDB-B)
Device Management – DynamicObjectBinding-B (DM-DOB-B)
Device Management – TimeSynchronization-A (DM-TS-A)
Device Management – TimeSynchronization-B (DM-TS-B)
Device Management – UTCTimeSynchronization-A (DM-UTC-A)
Device Management – UTCTimeSynchronization-B (DM-UTC-B)
Device Management – AutomaticTimeSynchronization-A (DM-ATS-A)
Device Management – DeviceCommunicationControl-B (DM-DCC-B)
Device Management – ReinitializeDevice-B (DM-RD-B)
Device Management – Backup and Restore (DM-BR-B)
Device Management – List Manipulation-A (DM-LM-A)
Device Management – List Manipulation-B (DM-LM-B)
Network Management – Connection Establishment-A (NM-CE-A)

Segmentation Capability:

Segmented requests supported, window size: 16
Segmented responses supported, window size: 16

Standard Object Types Supported:

For all the objects below the following apply if not stated otherwise:

1) Does not support the CreateObject and DeleteObject service
2) Properties Object_Name, Description support up to 64 characters
3) Includes the required properties as specified for the object class
4) All commandable objects support the Priority_Array and Relinquish_Default with 16 freely usable priorities
5) All analog, binary, multi-state objects support COV subscriptions
6) No additional writeable properties exist
7) No proprietary properties exist
8) No range restrictions exist
9) Analog, binary, and multi-state objects are limited to 512 objects in total

Device Object

List of optional properties supported:
Location, Description, Max_Segments_Accepted, APDU_Segment_Timeout, Max_Master[1], Max_Info_Frames[1], Active_COV_Subscriptions, Configuration_Files, Last_Restor_Time, Backup_Failure_Timeout, Local_Time, Local_Date, UTC_Offset, Daylight_Saving_Status, Time_Synchronization_Recipients, UTC_Time_Synchronization_Recipients, Time_Synchronization_Interval, Align_Intervals, Interval_Offset, Slave_Proxy_Enable, Manual_Slave_Address_Binding, Auto_Slave_Discovery, Slave_Address_Binding

Analog Input, Analog Output, Analog Value

List of optional properties supported:
Description, Reliability, Min_Pres_Value, Max_Pres_Value, COV_Increment, Time_Delay[2], Notification_Class[2], Low_Limit[2], High_Limit[2], Deadband[2], Limit_Enable[2], Event_Enable[2], Acked_Transitions[2], Event_Time_Stamps[2]

Binary Input, Binary Output, Binary Value

List of optional properties supported:
Description, Reliability, Active_Text, Inactive_Text, Time_Delay[2], Notification_Class[2], Alarm_Value[2], Feedback_Value[2], Event_Enable[2], Acked_Transitions[2], Notify_Type[2], Event_Time_Stamps[2]

[1] If device is operated with BACnet MS/TP enabled.
[2] If intrinsic reporting is enabled for this object.

Multi-State Input, Multi-state Output, Multi-State Value

List of optional properties supported:
Description, Reliability, State_Text, Time_Delay[2], Notification_Class[2], Alarm_Values[2], Fault_Values[2], Feedback_Values[2], Event_Enable[2], Acked_Transitions[2], Notify_Type[2], Event_Time_Stamps[2]

Notification Class Object, Schedule Object, Calendar Object

List of optional properties supported:
Description, Weekly_Schedule, Exception_Schedule
Object limit: 32 Notification Class, 100 Schedule, 25 Calendar objects.

Trend Log Object

List of optional properties supported:
Description, Start_Time, Stop_Time, Log_DeviceObjectProperty, Log_Interval, COV_Resubscription_Interval, Client_COV_Increment, Notification_Threshold, Records_Since_Notification, Last_Notify_Record, Notification_Class, Event_Enable, Acked_Transitions, Notify_Type, Event_Time_Stamps
Object limit: 100 Trend Log objects. There is a limit of 4,000,000 log records in total.

File Object

List of optional properties supported:
Object limit: 1 File object. This object is used for configuration backup and restore.

Data Link Layer Options:

☑ BACnet IP, (Annex J)
☑ BACnet IP, (Annex J), Foreign Device
☐ ISO 8802-3, Ethernet (Clause 7)
☑ MS/TP master (Clause 9), baud rate(s): 9600, 19200, 38400, 76800
☐ MS/TP slave (Clause 9), baud rate(s):
☐ Point-To-Point, EIA 232 (Clause 10), baud rate(s):
☐ Point-To-Point, modem, (Clause 10), baud rate(s):
☐ LonTalk, (Clause 11), medium:

Device Address Binding:

Static device address binding is supported.

Networking Options:

☑ Router, Clause 6 - List all routing configurations, e.g., ARCNET-Ethernet, Ethernet-MS/TP, etc.
☐ Annex H, BACnet Tunneling Router over IP
☑ BACnet/IP Broadcast Management Device (BBMD)
☑ Registrations by Foreign Devices

Character Sets Supported:

Indicating support for multiple character sets does not imply that they can all be supported simultaneously.

☑ ANSI X3.4	☐ IBM™/Microsoft™ DBCS	☑ ISO 8859-1
☑ ISO 10646 (UCS-2)	☐ ISO 10646 (UCS-4)	☐ JIS C 6226

Additional Information and Contact:

Further Information, a detailed User Manual and firmware updates can be obtained from our website ***http://www.loytec.com***.

For information and technical support please contact us at the following address:

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