LANSEN

Modbus master

DEVICE

The mains powered Modbus master, LAN-WMBUS-MOD-TP, is a wired Modbus to wireless M-Bus converter. The device is used to read out configured registers on connected wired Modbus slaves, and transmit the data wirelessly using the wireless M-Bus protocol.

ANTENNA

The ModBus master makes use of two high performance internal antennas. The two internal antennas takes advantage of both horizontal and vertical polarizations for maximum range while minimizing multipath problems. The antenna diversity is important to prevent losses due to different polarization, especially indoors.

STATUS MESSAGE

The device will, as default, on regular interval transmit a status message containing information such as:

- Number of messages transmitted on the bus since power-on
- Number of messages received on the bus since power-on.
- Which device has not answered last Modbus request.
- Number of stored Modbus questions (0-63).
- Device voltage level (RTU & RS485).

FIRMWARE

MODE	T1
READ OUT INTERVAL	Refer technical document
ENCRYPTION	Default AES128 encryption OMS 5. Profile A
MBUS DATA	Refer technical document

POWER/LIFETIME

POWER SUPPLY	230 VAC
RADIO	14 dBm (25mW) output power to antennas
	ERP typical: 13 dBm (19.9mW)
ANTENNAS	Two antennas for true differential transmission
MAX. STORED READOUT QUESTIONS	64

GENERAL INFORMATION

STANDARDS	2014/53/EU (RED)
	EN 13757-3/4:2013, OMS 4.0.2
	EN 301-489
	EN61000-6-2:2005
	EN61000-6-1:2007
MATERIAL	RAL 9003 (signal white)
IP	67 & 65
SIZE (W x H x D)	150 x 150 x 53 mm
CONNECTOR	2 cable screw mount connectors
INDICATION LED	
POWER	Green
TRANSMISSION (TX)	Blue
RECEIVING (RX)	Green
OVERLOAD	Red

ACCESSORY

LANSEN USB-DONGLE	LAN-WMBUS-D2-TC

USAGE

When the device is powered up the devices starts communicating according to the configuration of the device. The device is in standby if no readout questions has been configured yet. See technical documentation for more information.

When the device has been configured, either by using the software Lansen Configurator together with a Lansen USB-dongle or by remotely sending wM-Bus telegrams from any receiver, it will periodically request data from the configured Modbus slaves and registers.

Since it is possible to comunicate with the device remotely using wM-Bus, one can at any time configure the Modbus master to request more registers, adjust current registers or remove registers which are not needed anymore. If needed, one can also reconfigurate how often to ask each register for connected Modbus devices.

Furthermore, the possibility to remotely send commands to the device using wM-Bus one can also control connected Modbus, for example, starting or stopping a pump.

Specifications in this document are subject to change without notice
v.1.1