Lansen GW5 MAX – Wireless MBus to LTE Gateway



UTILITY GRADE FOR LARGE INFRASTRUCTURES

The Lansen GW5 MAX is built for demanding utility networks where range, robustness, and continuous operation are essential and it provides predictable and synchronized data delivery.

Its enhanced reception performance with separated receive and transmitter antennas ensures reliable collection in dense or complex environments, while its design supports large meter populations without compromising stability.

When paired with Lansen repeaters, the gateway maintains precise timing alignment, ensuring consistent network behavior across wide areas.

LAN-903-0070 LAN-WMBUS-GW5MAX-M-A2-X-CAT1/4G
LAN-903-0071 LAN-WMBUS-GW5MAX-M-A2-X-CAT1/4G-X (available upon request)

MQTT LTE-M M-Bus wireless OMS® ETHERNET

KEY BENEFITS

- Compact IP65 enclosure for indoor and outdoor installations
- High RF sensitivity for reliable meter collection
- Fully configurable upload and listening intervals
- Supports up to 2000 Wireless M-Bus meters
- Optimized for outdoor utility networks
- Repeater synchronization for aligned timing and stable network behavior
- TLS 1.2 and AES128 security for protected data transmission
- Touch-free configuration mode with magnet sensor Certificate-based authentication and secure MQTT(S) or HTTP(S) delivery
- Built-in Wireless M-Bus sniffer for on-site performance measurements

SYSTEM ARCHITECTURE & CLOUD CONNECTIVITY

PROTOCOLS CELLULAR	MQTT(S) 3.1, FTP, HTTP(S)
PROTOCOLS ETHERNET	MQTT 3.1
CERTIFICATES	Client, Server (Root)
TIME SYNC	NTP
AES-KEY MANAGEMENT	LansenOnline.com

CLOUD CONNECTIVITY OPTIONS

- **CAT1/4G (LTECAT1)**:
  Full LTE bandwidth with higher data rates.

Data is securely delivered using the MQTT or HTTP protocol, with TLS encryption and certificate based authentication.

CONFIGURATION & PROVISIONING

LOCAL PROVISIONING	USB-C, WMBUS
REMOTE PROVISIONING	MQTT
CONFIG TOOL	Lansen Configurator
FIRMWARE UPGRADE	Over-the-Air
ACTIVATION	Magnet

WIRELESS M-BUS PERFORMANCE

INPUT MODE	T+C-mode (default) or S-mode (max bit rate error ± 3%)
OUTPUT MODE	C-mode (default), T-mode or S-mode
MAX METERS	2000 meters
MAX WMBUS LENGTH	255 bytes
Status TX Interval	60 s
FILTERING	0–127 h suppression timer, RSSI, manufacturer filter, whitelisting
RECEIVER CLASS	2
SENSITIVITY	Down to-113 dBm
RADIATED POWER	868 MHz: ~14 dBm (< 25 mW) 434 MHz: ~10 dBm (< 10 mW)
FREQUENCY	868 MHz or 434 MHz
INPUT RF LIMIT	18 dBm
ANTENNA	Dual external SMA connectors

CELLULAR PERFORMANCE

LTE-CAT1 BANDS	LTE-FDD: B1/B2/B3/B4/B5/B7/ B8/B12/B13/B18/B19/B20/B25/ B26/B28/B66 LTE-TDD: B34/B38/B39/ B40/B41
SIMCARD SIZE	4FF/Nano-SIM
AVERAGE TX CURRENT	120–150 mA
PEAK TX CURRENT	LTE-CAT1: 900mA
ANTENNA	Optional SMA connector
UPLOAD INTERVAL	Configurable

APPROVALS & STANDARDS

RED	2014/53/EU
LVD	2014/35/EU
WM-BUS	EN 13757-3/4

SECURITY

TLS VERSION	1.2
WM-BUS ENCRYPTION	AES128
OMS PROFILES	A, B, D

STORAGE

TYPE	Flash
SIZE	~128 Mbit ~270000 wM-Bus packets can be stored if size is ~50 bytes

POWER & ELECTRICAL

POWER SUPPLY	M: 100-240 VAC, 50/60Hz
OVERVOLTAGE CATEGORY	III (up to 2000 m)

ENCLOSURE

DIMENSIONS	150x150x53 mm,
COLOR	RAL 9003 (signal white)
MATERIAL	UV-resistant PC/ABS
FLAMMABILITY RATING	UL 94 HB
FASTENING	4 screws, not included
LID SECURITY	1 x TH20 security screw
WEIGHT	~600g

ENVIRONMENT

POLLUTION DEGREE	3
TEMPERATURE	Enclosure: -20°C to +60°C Radio: -30°C to +60°C
ENCLOSURE IP-CLASSIFICATION	IP65

ACCESSORIES

LAN-WMBUS-D2-TC	Configuration dongle
LANSEN CONFIGURATOR	Configuration software
LAN-A-PMB-KIT-ID58-78	Pole mounting kit
LAN-MAG-R4	Magnet with telescopic shaft
LAN-R4-IP-KIT	Sealing kit for A2 enclosure Antennas Antenna cables

CONFIGURATION OPTIONS

OPTIONS FOR LAN-WMBUS-GW5 GATEWAY							
LAN-WMBUS	SERIES	POWER TYPE	RECEIVER SENSITIVITY	ENCLOSURE IP-CLASS	ANTENNA (wM-Bus)	CLOUD INTERFACE	ANTENNA (Cloud)
	GW5MAX Gateway gen.5	**M** 230 VAC		**A2** IP65 & IP67. Indoor and outdoor use.	**X** SMA connector for external antenna	**CAT1/4G** LTE Cat 1 interface	**X** SMA connector for external antenna
							(blank) Internal antenna

Specifications in this document are subject to change without notice.