

### DEVICE

The mains powered LAN-WMWUS-R2-M is the option where the Repeater device from Lansen is mounted with AC/DC adapter in combined enclosure. The device is a plug-and-play and highly configurable repeater for extending the range between a device and a collector. The device is available with internal antenna high performance antenna. The enclosure is chosen to make the repeater as discrete as possible.

### PERFORMANCE

Every minute a message is sent from the device with number of routed packages and the number of routed slots used and sw revision. This message could be used as an indication the device is up and running and the load of the repeater. This message is also used for time synchronizing in multihop system.

The device is highly immune to electrical disturbances that could be generated from example LED lights in buildings, etc.

### FIRMWARE

MODES	T, C and S mode (optional), (868MHz)
REPETITION	2 times
MAX SENSORS	1024 sensors.
MAX PACKET LENGTH	255 bytes
SUPPRESSION	0 to 30 min.

### POWER/LIFETIME

POWER SUPPLY	100-240V AC
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### GENERAL INFORMATION

STANDARDS	EN 300-220, EN 301-489, EN 60950-1 EN 13757-3/4:2013, OMS 3.0.1 *
TEMPERATURE	-20° / +55° other range upon request.
RELATIVE HUMIDITY	IP 67
COLOR	Grey
SIZE (W x H x D)	130 x 130 x 35 mm
MATERIAL	ABS
	* Delay time 2-30 ms.

### DEVICES

- LAN-WMBUS-R2-M-H1 AC/DC mains powered. 1 hop.
- LAN-WMBUS-R2-M-H23 AC/DC mains powered. 2-3 hop support

### ROUTING

The advanced collision avoidance algorithm minimizes problems with collisions and data repetition. To ensure proper functionality a randomized delay is used before repeating the message. The repeater family normally works with maximum 1 hop. That means that data cannot be sent from repeater to repeater. The repeater is however also available with an transparent, static routing algorithm, that allow controlled static multihop repeating, of wireless MBUS packets. The repeater supports the short and long transportheaders as well as extended link layer 2.

### CONFIGURATION

All devices could be used right out of the box but they are also highly configurable. It is for example possible to configure the "supression" timer to set the number of minutes before a data from a specific device should be routed again. For the multihop repeater is possible to setup the static routing used by the repeater, to allow safe multihop operation. It is also possible to configure the device to automatically append the RSSI value of the received data, to ease monitoring of the system. The on site configuration is performed using a Lansen wireless programming dongle.

### CONVERTER

The Repeater is also capable of not only extend the range, it also support conversion between different W-MBUS modes. The incoming data could be S mode for extended range and output could be T mode for increased compatibility. As standard the repeater accepts T and C mode and outputs C mode for maximum throughput.

