NOTE ABOUT MODBUS COMMUNICATION ISSUE  
WITH MESHGATE 6424 FIRMWARE V1.5.15 OR V1.75.15

Purpose of such note is to aware any Wi-LEM user of a potential modbus communication trouble with MeshGate 6424 loaded with firmware version V1.5.15 or V1.75.15.

DESCRIPTION

From time to time, the MeshGate returns the entire frame for the previous Modbus read request, and could even be from a different Modbus slave. For instance, the host sends read request of device 0x33, MG-6424 returns the entire frame for device 0xC9 instead (just previously accessed).
In details, the inter-character delay in the Modbus read packet sent to MG-6424 is longer than the timeout value and therefore the Modbus read is not accepted by the MeshGate, which answers to the previous read request, still in its internal buffer.
This inter-character delay is different from one configuration to another one, depending on the Modbus master (PC, PLC, ..) and its interface (direct serial communication, use of USB converter, ...). So, this behaviour never occurs in most of the configurations.
Moreover, a correct Modbus application has in charge to reject any answer which doesn’t fit with the request, especially if the Modbus addresses (in the request and in the answer) don’t fit.

CORRECTION

This behaviour has been corrected with new firmware versions 1.5.18 and V1.75.18 so that when MeshGate 6424 discards a Modbus request, it doesn’t send any response.

Device with firmware V1.5.15 needs to be updated with V1.5.18.
Device with firmware V1.75.15 needs to be updated with V1.75.18.

The firmware version can be read with MeshScape Network Monitor application in the MeshGate “version” details window (please refer to the Wi-LEM user guide).

For the firmware update procedure, please refer to the “Reprogram_MG6424” application note and use MeshScape Plus SBMG application to load new firmware version (V1.5.18 or V1.75.18) provided in an encrypted file.