

# WellMesh™ Modbus Gateway



## Part Number

- WML-WSG-04121  
Atex Zone 1/IP 67 rated
- WML-WSG-04120  
Din Rail Enclosure

## Product Description

The WellMesh MODBUS Wireless Sensor Gateway is a hazardous area rated, rugged and waterproof device that hosts a network of up to 16 wireless pressure sensors.

The Gateway interfaces wireless network data to field instrumentation systems by acting as a MODBUS device.

The device requires a 12-24VDC supply and connects to a MODBUS master device using a cable serial interface.

The Gateway can also be supplied in a DIN rail mount housing for use in a safe area or explosion proof enclosure.

## Specifications

### Environmental

- ATEX & IECEx Rating: Ex ib IIC T4 ( $T_{amb}=80^{\circ}C$ )
- Enclosure sealed to: IP67
- Case materials: Anodised Aluminium  
Antistatic Nylon 12
- Weight: 300g
- Fitting: Mounting bolt threading provided on underside of stainless steel flange. Can be mounted as bulkhead penetration with O Ring seal or on remote bracket.
- Cable: 4 core, preinstalled through gland. Customer defined length.
- Exposure: UV resistant materials
- Operating temperature:  $-20^{\circ}C$  to  $+80^{\circ}C$

### Radio Transceiver

- Frequency: 2.4GHz
- Power: 1mW
- Range: Up to 100m line of sight

### Wired Interface

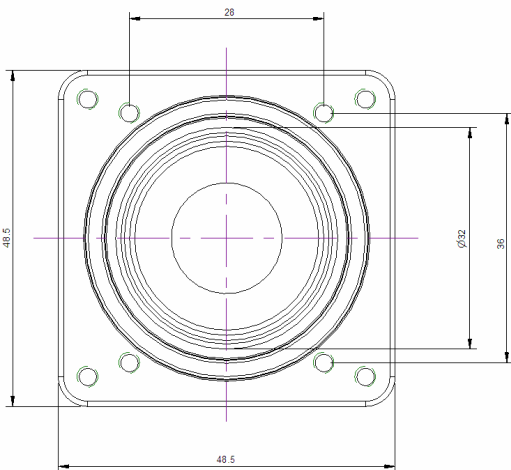
- Power: 12-24VDC  
Must use correct power supply to conform to Hazardous Area.  
MTL5051 can be supplied.
- Serial: 9600 Baud  
No flow control,  
8 data bits  
1 Stop Bit  
RS232

### MODBUS Configuration

- Register size: 16-bit.
- Network Registers: 2 read only registers to give wireless network status  
1 R/W register to switch the wireless network on/off.  
Block of 8 registers for each sensor.  
7 read only registers for sensor data and status.  
1 R/W to configure sensor remotely.
- Sensor Registers:



Scale  
approx 1:1



4 off M3 x 7x holes for mounting on 28x36 mm centres.  
Panel cut out to be  $\varnothing 33 \pm 1$  mm.  
O ring seal to be OR-0360-20 (36mm ID, 2.0mm section) Nitrile 70.

DIN Rail Housing  
105mm (l) x 86 (w) x 57 (h)  
Bernik A/s Series 1050  
Drawings available on request.

