

ModuMesh

Connect sensors wirelessly

Key Features

- Wireless communication on ISM band at:
 - 868MHz (EU)
 - 902-928MHz (Asia, Americas and Australia).
- Range: up to 1 km (line of sight)
- Encrypted communications by AES 128bits
- Auto routable
- IP54
- Up to 64 Modbus RTU (RS485) registers can be transmitted
- M12 female connector, 5 pin – power and Modbus
- Power Requirement: 9 to 30 vDC



About

ModuMesh is wireless Modbus RS485 mesh device. It allows you to wirelessly transmit data from sensors to a display or data acquisition module, thus removing the need for long runs of cable.

At a minimum, you need two (2) ModuMesh devices:

- one Primary Controller (connected to the Modbus Master, eg a display or data acquisition module) and
- one Node (connected to sensors)

The network follows a star topology, with all wireless communications converging at the Primary Controller.

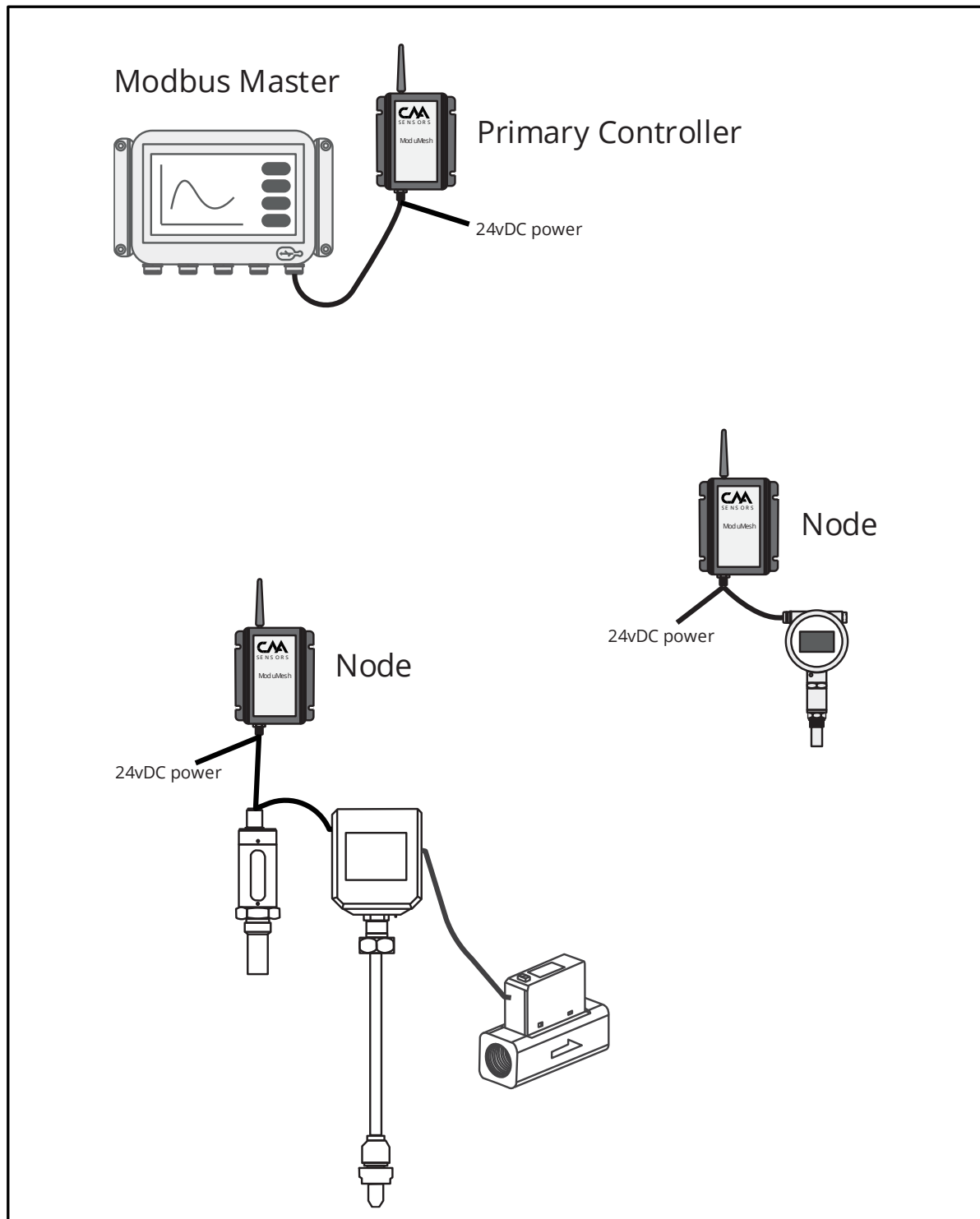
Applications

- Manufacturing and industrial use
- Temporary or permanent installation
- Where running cables between the sensor and Modbus master is difficult



More Info

Setup



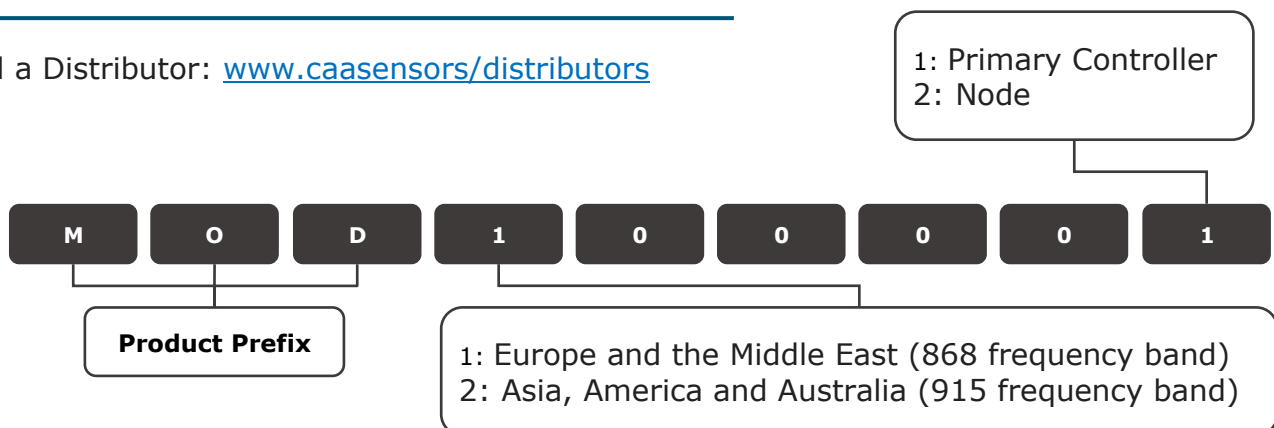
Specifications

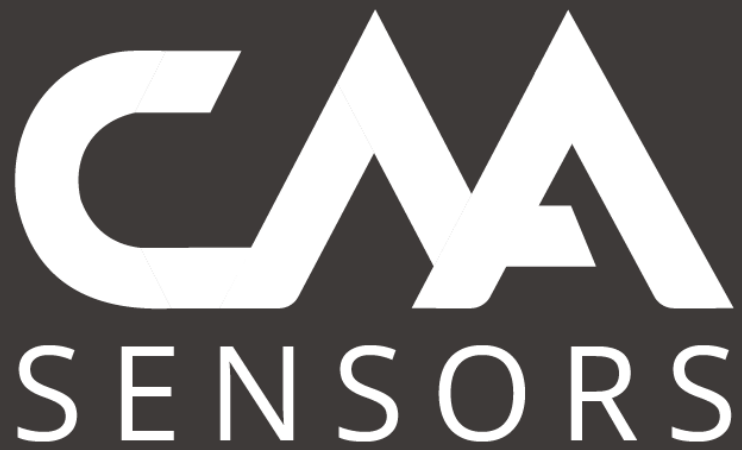
Radio		
Radio Frequency	EU	868MHz
	Australia, Asia and Americas	902-928MHz
Sensitivity	-104dBm typ	
RF Power	Up to +26 dBm	
Range	Up to 1km (line of sight)	
Antenna	SMA Female connector with a 3m cable	
Inputs / Outputs		
Input	M12, 5 pin male connector	
Modbus Protocol	Modbus RTU (RS485)	
Wireless	Wireless AES128 Encrypted Mesh	
Power		
Power Supply	9 to 30 vDC	
	9vDC @ 80mA	30vDC @ 24mA
Consumption	Idle	170 mW
	Transmitting	Peaks up to 700 mW
Electrical Connection	M12, 5 pin male connector	

Other	
Ambient Temperature	-25°C to +70°C -13°F to +158°F
Relative Humidity	5 to 95% RH without condensation
Mounting	Wall Mount
Casing	Powder-coated Aluminium
IP Rating	IP54
Dimensions	120 x 98 x 27 mm 4.7" x 3.85" x 1.1
Warranty	12 months
CE	<ul style="list-style-type: none">• UNE-EN 60950-1:2007 + Corr:2007 + A11:2009 + A1:2011 + A12:2011/AC2012 (Partial)• UNE-EN 61000-6-1:2007• UNE-EN 61000-6-3:2007• UNE-EN 55 022:2011 + Err (UNE-EN55022:2011/AC)• UNE-EN 55 024:2011• EN 301489-1 v1.8.1 (2008-02) (Partial) (1 – 6 GHz Band)
HS Code	8517.62.00

How to Order

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