Overview

- Wireless communication on ISM band at 865-867MHz (India), 868MHz (EU), 902-928MHz (Americas and Australia).
- Up to 1 Km range on Line of Sight.
- Encrypted communications by AES 128bits.
- Auto routable.
- Modbus RTU wireless transmission
- Modbus RTU RS485 transmission
- Power range: 9Vdc@80mA <=> 30Vdc@24mA
- Count of pulses and real input status stored in an internal Modbus register.
- One Open Drain output.
- DIN-Rail mounting
- Firmware updatable via microUSB.
- Capable to be adapted to other industrial communication protocols.

Characteristics

General

Power supply:	9Vdc@80mA to 30Vdc@24mA
Consumption:	<1 W

Radio

Frequency:	865-867MHz (India), 868MHz (EU), 902-928MHz (Americas and Australia)
Sensitivity:	-104dBm typ
RF Power:	Up to +26 dBm
Range:	Up to 1km
Antenna:	SMA Female connector – not included

Interfaces

microUSB:	Configuration port (19200 bps UART)
RS485:	Up to 1.2 km distance, speed up to 19.2 kBaud

Discrete inputs/outputs

Pulse input:	Wet contact (up to 30Vdc), Dry contact
Detecting frequency:	Up to 30Hz
Discrete output:	Open Drain 2A

Protocols

Modbus RTU, Wireless AES128 Encrypted Mesh

Working conditions

Working temperature:	-25 .. +70°C
Storage temperature:	-40 .. +70°C
Humidity range:	5 – 95%, w/o condensation

Regulatory approvals

CE

*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
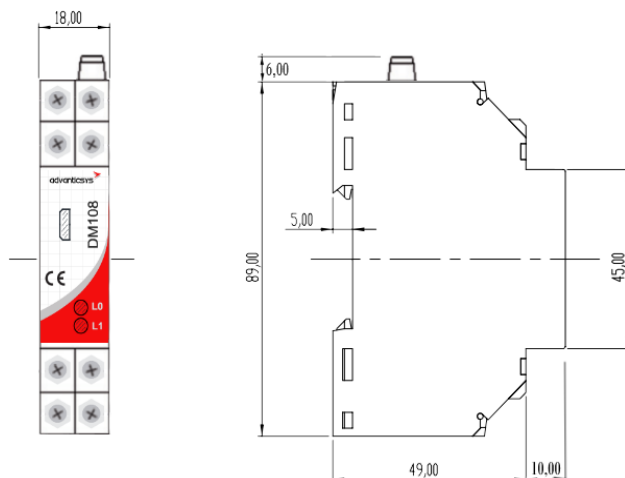EN 301489-1 v1.8.1 (2008-02)(Partial)(1 – 6 GHz Band)*

Physical characteristics

Dimensions:	18x89x59 mm
Material:	PC/ABS
Protection type:	IP20
Mounting:	DIN rail compatible

Other features

Made in the EU

Dimensions (mm)

Connections
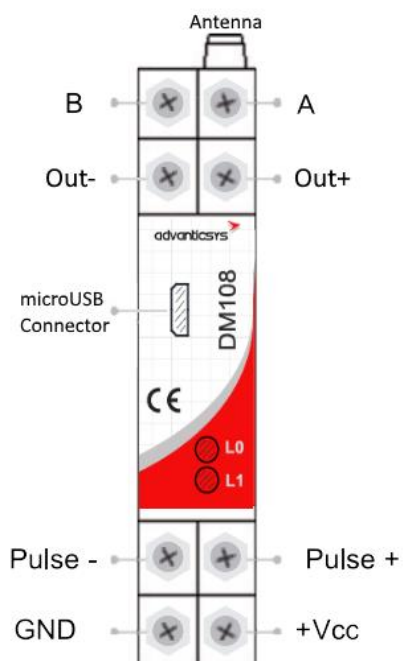
Description of connections	
Antenna	SMA Connector for 868MHz antennas
A	Terminal A RS485.
B	Terminal B RS485.
Out+	Terminal of the Drain of the driver.
Out-	Terminal connected internally with the DM108 ground.
Pulse+	Positive Pulse Input Terminal
Pulse -	Negative Pulse Input Terminal
+Vcc	Power Source Positive Terminal
GND	Power Source Ground Terminal
microUSB connector	May used as UART to recover a configuration. Also for firmware update
LEDS	
L0	Blink each 10000 work cycles.
L1	Blink with any transmission or reception in any of each communication channel.