

Accuenergy AcuMesh L-900 Mesh Transceiver



PRODUCT DESCRIPTION

Connect any device to form a point to multi-point mesh network. AcuMesh transceiver eliminates the usual wires in a RS485 installation by using a flexible and simple wireless communication solution. AcuMesh devices maintain all advantages of a standard RS485 network but without the messy wires. Each RS485 device connects directly to an AcuMesh transceiver which enables point to point device communication.

PRODUCT DETAILS



Long distance communications
(305m Indoor
6.5km Outdoor)



Highly secure 128-bit Advanced Encryption Standard (AES)



RS485 Compatible :
(Wireless Modbus RTU, Profibus, DNP 3.0 etc)



Point to point communication



Each transceiver acts as an extension point for the network



Automatic self-healing Mesh Network

APPLICATIONS



Facilities Management



Power & Energy Management



Solar & Battery Management



Fuel & Liquid Management

BENEFITS

- Communicate wirelessly between power and energy meters, and any devices with RS485 running any protocol within a building or campus
- “Mesh” network structure allows each transceiver to act as extension points for the network, allowing for a longer range of communication
- The automatic self-healing, self-optimizing network allows transceivers to find the optimal pathway for communication
- Available in Din-Rail, Wall mount or Surface mount form factor

Accuenergy AcuMesh L-900 Mesh Transceiver – Technical Details

AcuMesh L- 900

Connection	RS485 screw terminal, USB mini-B (power supply and/or configuration)
Serial Baud Rate Range	9600 - 230400
RF PROPERTIES:	
Operating Frequency Band	902MHz to 928MHz (900Mhz ISM Band)
Number of Channels	64
Spread Spectrum	Frequency hopping
Transmit Power Output	24 dBm (250 mW)
Receiver Sensitivity	-101 dBm
Indoor/Urban Range	Up to 305 m
Outdoor RF line-of-sight Range	Up 6.5 km with 2.1 dB dipole antennas
RF Data Rate	Up to 200 kb/s
Antenna	Antenna-2db-whip (Included in Kit) Optional 2db-3m-s or 7db-3m-s Antennas
Antenna Impedance	50 ohms unbalanced

NETWORKING AND SECURITY

Supported Network Topologies	Mesh, point-to-point, point-to-multipoint, peer-to-peer
Addressing Options	Personal Area Network Identifier (PAN ID) and 64-bit MAC add addresses
Encryption	128 bit Encryption Standard (AES)
Power Requirements	Power supply included
Power Supply	100-240Vac 47-63Hz Wall Plug
Power Supply	0.54W
Power Supply	1.26W

PHYSICAL PROPERTIES

Size	11.4 x 7.0 x 2.9 cm
Weight	150g
Mounting	Surface mount
Includes	Transceiver, Antenna, Power Supply
Certification	United States (FCC P

ACUMESH TRANSACEIVER EXAMPLE

