



DATASHEET:
**MESH REPEATER
UNIT DI 20115**

PRODUCT SUMMARY

The Delta Integrated DI 20115 is a Repeater unit specifically programmed to act as an additional point of communication within a mesh. It is the perfect solution for systems that are spread over a larger distance or for those where there is a greater potential for communications interference. It is housed in a weatherproof enclosure.

The 20115 employs SNAP OS, the industry's first internet-enabled, wireless mesh network operating system, into the Atmel ATmega128RFA1 single-chip AVR® microcontroller with an integrated transceiver that delivers up to 2M-bits/sec. SNAP OS on-board Python interpreter provides rapid application development and over-the-air programming, while Atmel's low-power RF single-chip design saves board space and lowers power consumption. The modules provide up to 16 channels of operation in the ISM 2.4GHz frequency band.

BENEFITS AT A GLANCE

- Powerful, low cost signal boosting
- Powerful processing to manage the data transmitted over the mesh network
- Weatherproof enclosure for external applications
- RF Data rate up to 2Mbps
- Transmit power output up to +20 dBm
- SNAP mesh enabled (2.4GHz, IEEE 802.15.4)
- RF Data rate up to 2Mbps
- Self-healing mesh network
- -20°C to +60°C industrial operating temperature

COMPLIANCE

- ACMA Radiocommunication (Low Interference Potential Devices) Compliant
- SNAP mesh enabled (2.4GHz, IEEE 802.15.4)

APPLICATIONS

- Securing mesh communication channels
- Extending the range of the mesh network

SPECIFICATIONS

Electrical rating

- 12-24Vdc

Dimensions

- 250 x 300 x 205mm

Mounting

- 4 mounting holes on the rear of the enclosure

PRINCIPLES OF OPERATION

The DI 20115 operates using the SNAP Mesh Network. This innovative and secure technology ensures stable and near instantaneous network communications. In the event that the direct route of communication between units is broken the mesh can reroute communications to ensure continued communication.

CERTIFICATION

- FCC Part 15.247, FCC ID: U90-SM220
 - Industry Canada (IC), 7084A-SM220
-