



DATASHEET:
**SINGLE ANALOGUE
PCB UNIT DI 20110**

PRODUCT SUMMARY

The Delta Integrated DI 20110 is a PCB edge device featuring a single analogue, 3 digital inputs and a single relay control output.

It is the perfect solution for simple single device control and monitoring where the node needs to be mounted in special enclosures, or within the monitored devices enclosure, providing a cleaner integrated product.

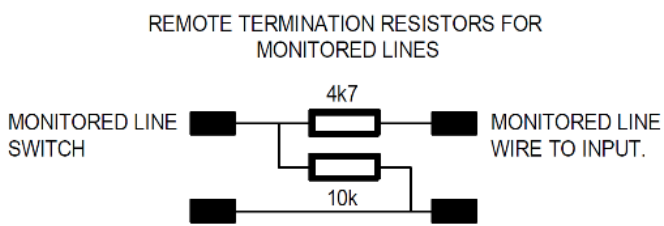
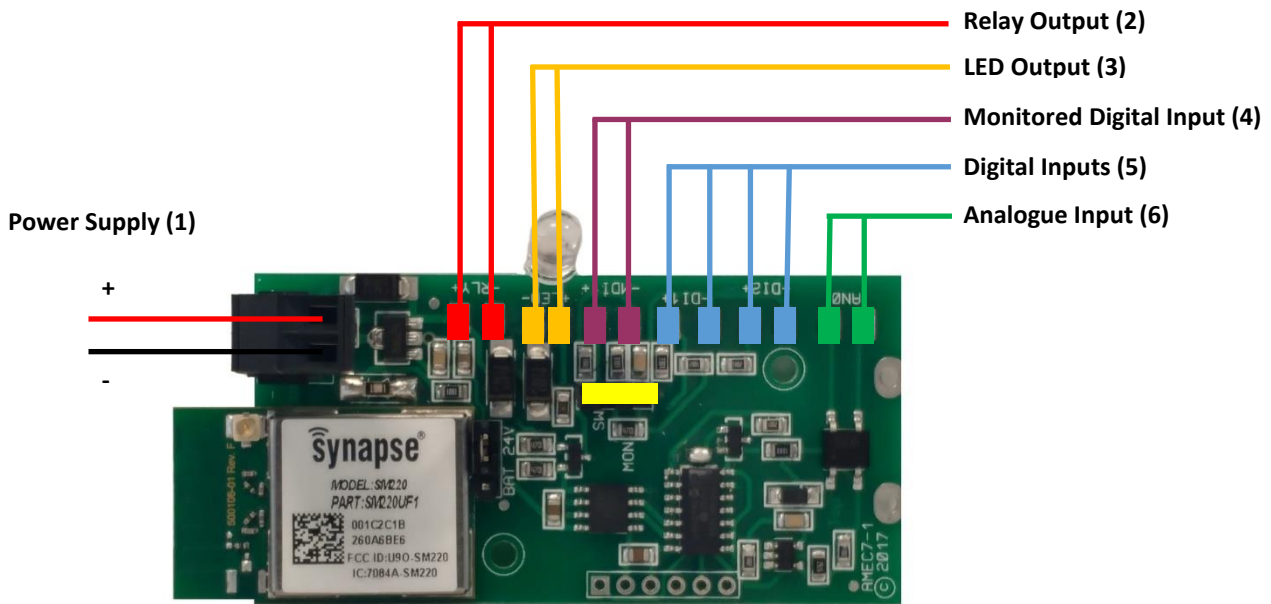
The 20110 employs SNAP OS, the industry's first internet-enabled, wireless mesh network operating system, into the Atmel ATmega128RFA1 single-chip. AVR® microcontroller with an integrated transceiver that delivers up to 2M-bits/sec.

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.

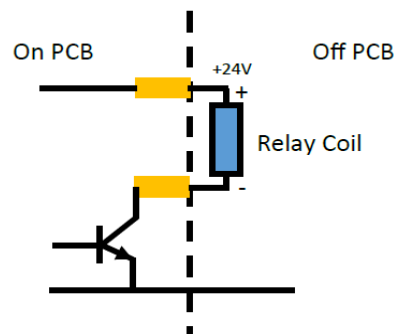
BENEFITS AT A GLANCE

- 3 x Digital Inputs
- 1 x 4-20mA Analogue Input
- 1 x Relay Control Output to be connected to a relay coil
- Compact design perfect for installation in tight spaces
- Transmit power output up to +20 dBm
- SNAP mesh enabled (2.4GHz, IEEE 802.15.4)
- RF Data rate up to 2Mbps
- Powerful processing to manage the data to and from the inputs and outputs at high speeds
- Self-healing mesh network
- -20°C to +60°C industrial operating temperature

CONNECTION DIAGRAM



Relay Diagram



COMPLIANCE

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

APPLICATIONS

- Monitoring standalone devices
- Monitoring multiple outputs of a single device
- Simple (1 output) control systems
- Simple (1 output) localised (non-mesh) monitoring and control

SPECIFICATIONS

Electrical rating

- 12-24Vdc

Dimensions

- 72.5 x 32 x 20.5mm

Mounting

- 2 x 1.5mm diameter mounting holes

PRINCIPLES OF OPERATION

The DI 20110 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