

N-save

Demand Response Enabling Device

Product Description:

NNNCo's N-save DRED (Demand Response Enabling Device) is a LoRaWAN based purpose-built controller designed to manage energy loads.

N-save units comply with AS4755 to provide controls required to properly manage a range of loads, such as hot water circuits and pool pumps.

The units support multicast capabilities to allow effective management of groups of energy loads with a single command.

Features:

- Uses the LoRaWAN communications technology for connectivity
- Supports unicast and multicast packet delivery mechanisms through the N2N IoT Control Suite for configuration, control and energy reporting
- Operates on the Australian ISM (915-928 MHz) frequency band and supports multiple LoRaWAN bands including EU868, US915, AU915 and AS923
- Supports general purpose switching control such as a Single Pole Single Throw (SPST) relay rated 230-240V AC and 40 Amp
- Supports up to 6 CT's for current monitoring and 3 voltage channels. Provides Class 1 energy metering
- Custom design for OEM packaging available



About NNNCo

NNNCo is building a carrier-grade LoRaWAN network for IoT in Australia, complete with redundancy and customer-focused network support and scalable end-to-end solutions.

We provide integration of end-to-end industrial grade solutions in key areas such as agriculture, utilities, infrastructure and cities, access management, and asset monitoring.

N-save Product Specifications

Physical Specifications

- Standard 35mm DIN Rail unit (EN 50022) – 36mm wide enclosure
- Option to increase enclosure width dependent on the number of load circuits under management

Radio Specifications

- ISM (Industrial Scientific and Medical) Band operation (915-928MHz in Australia and supports multiple LoRaWAN bands including EU868, US915, AU915 and AS92
- LoRa Alliance certified compliant LoRaWAN endpoint device
- Class C operation supporting multicast applications
- Enhanced reference stability crystal
- Enhanced transmitter allows transmit power up to 18dBm
- External SMA antenna port for high-gain antenna as needed
- Receiver sensitivity to -135dBm

Security

- Standard LoRaWAN security
- Hardware accelerated AES cryptography
- Optional ST-SAFE secure element for state of the art security and authentication to support multicast keys

Environmental

- Operating temperature between -20°C to +60°C

Power Consumption

- Local power supply voltage and frequency. Power use less than 1W. LoRaWAN Class C operation (always listening for commands)

Functional Specifications

- Integrate out-of-the-box with the N2N IoT Control Suite and other 3rd party portals via published API's
- Supports open standard or custom protocols via the N2N IoT Control Suite
- LoRaWAN supported Multicast capability – supports control and management of groups of N-save units, depending on a range of pre-set properties
- Multicast energy reporting

Compliances

- LoRa Alliance compliant with global multi-regional band support (Europe/USA/Asia)
- AU/NZS 4268: 2012 Radio equipment and systems – Short range devices
- AU/NZS CISPR22: 2009 Information technology equipment – Radio disturbance characteristics
- Australia/NZ – RCM
- AU/NZS 60950: Electrical Safety

For more information, contact us at

info@nnnco.com.au

Level 1, 18 Bulletin Place
Sydney, Australia