

Wireless, cloud based IoT gateway



DATA SHEET

Managing a network of field assets has never been easier with the NanoULTRA – III. It has the flexibility of up I/Os, option of integrated SD card and communication via mobile phone networks. Its high resolution data transfer happens seamlessly and securely from multiple assets to our secure cloud platform, the CDLSmartHub™, where the raw data can be turned into actionable insights.

From the CDLSmartHub™ you can configure and manage assets, set alarms, view audit trails, integrate and export data, view trends, visualise data and integrate 3rd party analytics. Investing in the NanoULTRA - III and CDLSmartHub™, gives you access to a fully integrated end-to-end IoT solution to effectively manage your assets.

Key Features

- Seamless cellular communication with the CDLSmartHub™ asset cloud platform.
- Simple installation and configuration, achievable at scale with non-technical employees
- RS485/232 communication with toolset to quickly set up Modbus communications (one off configuration charges apply – see price list)
- On board WiFi and Ethernet connectivity
- Digital and Analogue i/o's available (CDL also offer wide range of expansion modules)
- World wide accreditations offering a truly global, enterprise grade solution
- GPS location and tracking capabilities
- Integrated SD card storage for mass storage of granular data sets
- Firmware Over The Air (FOTA) for agile innovation and system management – no need to



Cloud based IoT platform



Email and SMS alerts

Application Examples

Single and multi-site installations • nationally and internationally • Embedded solutions for original equipment manufacturers (OEM) • Energy & carbon management systems • Voltage optimisation • Water quality instrumentation • Process monitoring and control • Corrosion monitoring • Clean renewable & Hybrid power • Portable generators • UPS & emergency power systems • Smart building controls • Smart grid transformer monitoring



Technical Specification



Physical

Aluminum housing, plastic panels
 100 x 110 x 50mm
 Weight 287g
 Supplied with DIN rail adapter

Power Supply

9 – 30 VDC, 4 pin DC connector

Standard On-board Inputs and Outputs

3 x Inputs
 (Digital, Digital galvanically isolated,
 Analog) + 1 Digital Input on power connector
 2 x Outputs (30 V, 250 mA digital open
 collector output / 24 V, 4 A SPST relay output)
 + 1 Digital O.C. Output on power connector

Communication connectivity

RS232
 RS485
 Enhanced tool set for Modbus register mapping

Modem

2G/3G/4G
 4G (LTE) – Cat 4 DL up to 150 Mbps, UL up to 50 Mbps;
 DC-HSPA+; UMTS; TD-SCDMA; EDGE; GPRS

Sim

2* External SIM holders

Antenna and Connector

SMA male.
 Stub antenna included with unit
 GPS antenna ordered separately

FOTA

All firmware is FOTA enabled
 (firmware upgrade over the air)

Part codes

Worldwide—NUIII-GLB-001

EU variant—NUIII-EUR-001

LEDs and Button

1 x bi-color connection status
 5 x connection strength
 4 x LAN status
 1x Power

Connectors

1 x 4 pin DC, 4 x Ethernet, 2 x Mobile SMA, 2 x WiFi RP-SMA , 1 x
 GPS SMA, 1 x RS232, 1 x 6 pin RS485, 1 x 10 pin I/O, USB 2.0

Environmental

-40 to +75 °C (operational)

Location

Can be tracked with GPS
 Cell mast location if GPS not available

Approvals

CE/RED, FCC, AT&T, Verizon, PTCRB, RoHS, WEEE

Expansion signal conditioning module options

- 8* Relay output
- 16* Digital input
- 8* Analogue input (0-10V), 2* analogue o/p (0-10V) 4*DO
- 8* Analogue input (4-20mA/thermocouple/thermistor) 4*DI

