Nano ULTRA-III
UNIVERSAL ASSET TO CLOUD SOLUTION

050-LAA-*Lite* DATA SHEET

Managing a network of field assets has never been easier with the NanoULTRA – III *Lite*. 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 *Lite* 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 communication with toolset to quickly set up Modbus communications (one off configuration charges apply – see price list)
- Digital and Analogue i/o's available (CDL also offer wide range of expansion modules)
- Worldwide accreditations offering a truly global, enterprise grade solution
- Tracking capabilities
- Firmware Over the Air (FOTA) for agile innovation and system management

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
Aluminium housing
74.5 x 25 x 64.5mm
Weight 130g

Power Supply
9 – 30 VDC, 4 pin DC connector

Standard On-board Inputs and Outputs
2 x Configurable Inputs/Outputs.
Digital input 0 - 6 V detected as logic low,
8 - 30 V detected as logic high.
Open collector output, max output 30 V, 300 mA

Communication connectivity
RS485
Enhanced tool set for Modbus register mapping

Location
Cell mast location

Approvals
CE/RED, EAC, RoHS, WEEE

Modem
2G/3G/4G
4G (LTE Cat1)

On board Ethernet
No

LEDs and Button
3 x connection status (2G/3G/4G
3 x Signal connection strength
1x Power

Connectors
1 x 4 pin DC
1 x 6 pin RS485
1 X SMA for LTE*(+ Micro USB)

Environmental
-40 to +75 °C (operational)

SD Card
No

SIM Holder
Single Sim

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TECHNICAL SPECIFICATION

On board memory (for when communications are interrupted)
200 modbus registers, sampled at a 20 second sample rate
can be stored for 24 hours before being over written

Description	Part code
Modbus RTU to 8 DO Digital Output, Power Relay module	003-ADI-001
Modbus RTU to 16 DI Digital Input module	003-ADJ-001
Modbus RTU to 8AI (0-10V),2AO(0-10V), 4 DO module	003-ADK-001
Modbus RTU to 8 AI Analogue module	006-ACZ-001

Antenna and Connector
1 x LTE antenna (magnetic mount, SMA male, 3 m cable
FOTA
All firmware is FOTA enabled
(Firmware upgrade over the air)

Software CDLSmartHub™ IoT platform connectivity
Expansion signal conditioning module options available

Power socket

RS485

Connection strength

USB Connector

LTE antenna connectors

2G/3G/3G

Part codes 050-LAA