product data

DCU390-PH —Logger
Asset Condition Monitoring - Points Heating

The **Findlay Irvine** Data Collection Unit **DCU390-PH** is a data logger for use in Remote Condition Monitoring applications for track assets. The DCU390-PH has been designed to meet and exceed Network Rail's current data logger standard (NR/L2/SIF/30036). The unit is fully compatible with Network Rail's data logger standard (NR/L2/SIG/30036) and Intelligent Infrastructure Remote Condition Monitoring system (II-RCM-Interface-Spec). The DCU390-PH has been designed to be easily mounted within points heating cubicles and its input configuration has been set to suit points heating applications.

- The **DCU390-PH** can handle numerous applications concurrently including: Insulation, Point machine, Event and Track circuit monitoring, Points Heating.

- The **DCU390-PH** has 12 analogue and 6 digital inputs, expandable via slave units. An ambient temperature sensor is included.

- The **DCU390-S** standard slave unit has 6 analogue and 16 digital inputs connection to Master is via inbuilt optically isolated RS485, fiber optic link, low power radio (subject to approval). Other Slave configurations are available and can be used with the DCU390-PH.

- Time synchronization is through Network Servers or GPS receiver.

- Communication options are GPRS, Ethernet (FTN), fiber optic, WiFi.

- In-built colour touch screen displays indicators, input status, configuration and local diagnoses.

- Modules are robust and compact occupying a single Miniature Relay space with same fixing and can be replaced without rewiring.

- Capable of local data processing/analysis, remotely upgradeable.

- Configuration can be created and stored independently of the DCU via configuration software. Configuration can then be uploaded remotely or automatically via memory card. Allowing easy reconfiguration of replacement units.

FINDLAY IRVINE

DCU390-PH	Master Unit
Supply voltage:	110Vac
Supply current:	0.8A at 110Vac RMS
Battery backup supply:	Li-ion rechargeable, minimum 20 minutes operation
Operating Temperature:	-25 to +70°C
Electrical Isolation:	>4Mohm measured at 250Vdc to Earth.
Dimensions:	235 x 200 x 76mm (HxWxD) approx.
Form and fittings:	Flanges to allow simple mounting to back panel
Weight:	3Kg
Memory:	64-256MB 266MHZ DDR SDRAM
	128Mbytes - 1Gbytes Flash Disk
Inputs/Outputs:	12 analogue inputs, voltage or 4-20mA
	6 isolated digital inputs, event monitored
	110V Relay Output
Analogue Sample Rate:	Up to 1kHz per channel
Clock:	Battery backed real time clock
Communications:	RS485 connection to slave units/sensors
	RS232 connection other sensors/equipment
	RS232 connection to GPRS modem (see below)
Data Memory:	Two SD Memory cards, one (easily) removable
Ethernet:	Fully compliant with IEEE 802.3/802.3u standards
	Integrated Ethernet MAC and PHY
	10BASE-T and 100BASE-TX support
Controls and Indicators:	QVGA Colour touch screen LCD (DCU390mr only) Status Leds
GPRS Modem:	GPRS Class 10, PBCCH support, Coding Schemes: CS1 to CS4, Embedded TCP/IP Stack

DCUView — Remote display software

DCUView is a software package which allows remote access to the logger to extract data, reprogram, and update configurations.

DCUConfig — DCU configuration software

DCUConfig is a software package allowing a configuration file to be created for a DCU Master or Slave Unit. This configuration file can then be uploaded to the Master or Slave unit either locally via a USB memory stick or remotely via FTP or DCUView. The configuration includes the Input Output map and also which asset types are being monitored. This allows replacement units to be easily re configured.