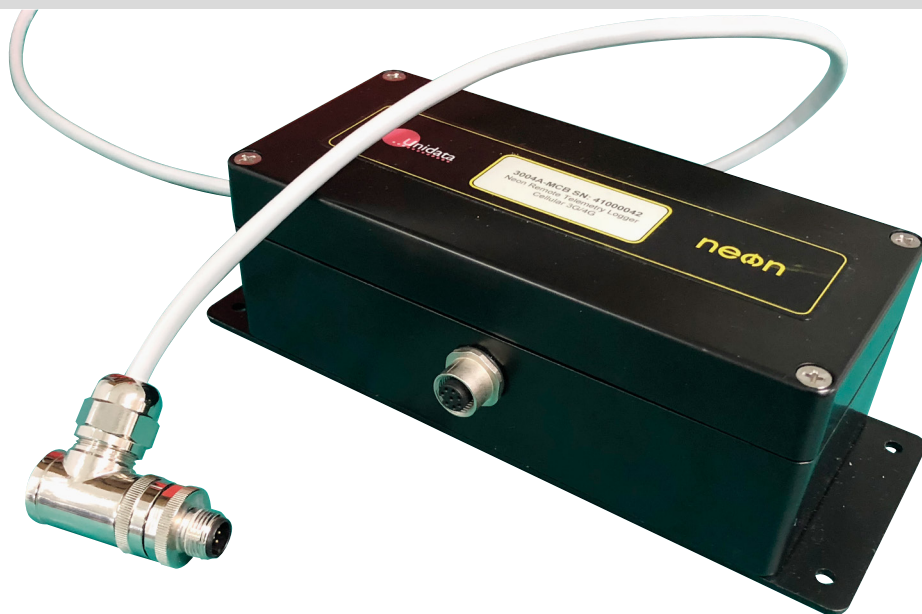# NRL IP68 Data Logger 3004-MIP68

Any Neon Remote Logger from 3004M/3006M range can be housed in aluminium IP68 rated enclosure.

When high standard water protection is required, Unidata M series Neon Remote Loggers can be housed in a rugged die cast IP68 rated aluminium enclosure. Selected enclosure satisfies the requirements of IEC60529 IP68 conditions - being submerged under more than 1m of water for 24 hours without any water ingress.

Enclosure is powder coated for extra corrosion protection and equipped with a circular 8 way IP68 stainless steel connector. Matching IP68 stainless steel connector is either assembled onto sensor, if available, or provided for customer to use.

SPECIFICATIONS

PHYSICAL SPECIFICATIONS	
MATERIAL:	Aluminium Alloy
SIZE:	L210mm x W80mm x H60mm, 635g
OPERATING TEMPERATURE:	-20° to +60°C. Not affected by humidity
ANTENNAE:	Dependent on a model chosen

ELECTRICAL SPECIFICATIONS	
EXTERNAL POWER:	9 to 30V DC
CURRENT DRAW:	50µA Standby
RTC BACKUP BATTERY:	3.6V Li Coin Cell (5 year life)
INTERNAL POWER:	3.6V Lithium D Cell
INSTRUMENT POWER:	5V, 12V or 18V regulated, 80mA (user selectable)
INSTRUMENT REFERENCE VOLTAGE:	5V 10mA Max
ANALOG CHANNELS:	3004: 4 Single ended (max) or 2 Differential (max) 3006: 6 Single ended (max) or 3 Differential (max) 24 bit resolution, 4 user selectable gain ranges 0 to 5000mV (gain=1) to 0 to 39mV (gain=128)
MODBUS:	1 x independent channel, RS485, RTU or ASCII protocol, 57600 baud (max), Functions 01, 02, 03, 04, 05/15, 06/16
SDI-12:	1 x independent channel, SDI V1.3 Compliant, instrument and recorder modes supported
UNIDATA HSIO:	High speed serial interface, 16 channels, bi-directional

COUNTERS 3004:	2 x 16 bit, DC to 20kHz potential free contacts or 0 to 5V DC digital input (C0, C2); 2 x 16 bit, DC to 300Hz potential free contacts or 0 to 5V DC digital input (C1, C3)
COUNTERS 3006:	1 x 16 bit, DC to 20kHz potential free contacts or 0 to 5V DC digital input (C0); 1 x 16 bit, DC to 300Hz potential free contacts or 0 to 5V DC digital input (C1)
DIGITAL OUTPUT:	1 x Open Drain FET, 30V DC, 250mA max
CONFIGURATION PORT:	USB B Micro Port and SD Micro Card
OPERATION FREQUENCIES:	Dependent on a model chosen
ACCELEROMETER:	Senses changes in logger orientation
BAROMETER:	260-1260hPa Absolute Digital Output
IP RATING:	IP68
NEMA RATING:	4, 4X, 6, 6P, 12, 13

INTEGRATED LOGGER SPECIFICATIONS	
STORAGE MEMORY:	7.5Mbytes Flash (non-volatile), 3.75 Million log data points
MEMORY EXPANSION:	SD card, micro size, 32Gbyte maximum capacity, 16 Billion log data points
SCAN RATE:	Programmable from 1 second to 5 minutes
LOG RATE:	Programmable from 1 second to 24 hours
TIME CLOCK:	Battery Backed Real Time Clock (RTC), Accuracy +/-10 seconds/month (non-Neon version), locked to server time clock (Neon version)
CPU:	16 Bit, 20MHz, Ultra Low Power