

Wireless IP-Capable Datalogger

DATA ACQUISITION | HYDROLOGY | GROUNDWATER | FLOOD | WATER QUALITY

General Description

The iRIS 270 is the perfect marriage of the proven iRIS design legacy with a future-proof architecture. It is **compact, cost effective, ruggedized, IP-capable and easily configured** - and due to its dual telemetry slots the iRIS 270 extends the telemetry options and the range of pluggable devices.

The **dual telemetry slots support wireless 4G/3G modem, ethernet, and RS232/RS485.**

They can be used for communication redundancy: e.g. two cellular modules each with a different SIM card from independent ISP providers or a communications device connected via RS232/RS485.

The iRIS 270's **WiFi hotspot enables access to the device wirelessly** using HyQuest Solutions' **free-of-charge iLink software** (Windows). With a max. range of 262 ft in clear line of sight (and a strong signal from the connected device), the user can edit settings while reading the staff gauge on the river-bank, doing a stream flow gauging, or sitting in his car in rainy conditions. iLink helps configuring, checking settings and calibrations for QA/QC, performing **real-time diagnostics** to resolve technical issues, and downloading data. The optional HydroTel™ software can be used for remote configuration and data downloading.

Main Features

- Dual-comms option
- Modem: built in 4G with 3G fallback
- Aluminium die-cast housing
- IP66
- Low power consumption
- Battery operated and solar chargeable
- Up to 50 virtual sensors
- Non-volatile memory
- Local wireless configuration and data download

Further features

- Small graphics LCD display and 5 button keypad for viewing general and sensor information, running totals, etc.
- Calibrations, firmware upgrades and service and maintenance records stored in allocated non-volatile memory

Applications

The iRIS 270 is especially suitable for

- Data Acquisition
- Hydrometric Stations
- Automatic Weather Stations
- Environmental Monitoring
- Agrometeorological Monitoring



Technical Specifications

Digital Input/Output

- 1 digital I/O channel, 1 digital output channel, 2 digital input channels
- Inputs: clean contact to 0 V **or** 3.6-12 V DC referenced to GND
- Outputs: switched 12 V **or** open-drain sinking to 0 V, both limited to 100 mA

Analogue Input/Output

- 2 analogue inputs: uni-polar, 16 bit resolution, 30 V DC surge-protection
- Input ranges: 0-0.1 V, 0-2.5 V, 0-5 V, 0-30 V
- Internal 100 Ω sink resistors allow use of input current (0/4-20mA).
- 1 analogue (excitation) output for energizing passive instruments (e.g. potentiometer type wind vanes) or alternatively for sending a derived analogue signal to other equipment, selectable as 0-5 V or 4-20 mA

Communications

- Dual telemetry slots for wireless 4G/3G modem, ethernet, RS232/RS485
- Non-isolated 2-wire half-duplex RS232/RS485 sensor port
- SDI12 instrumentation port (two terminals), complies with SDI12 V1.3
- Wi-Fi

Power Supply

- External 12 V SLA or 11.1 V Li-Ion battery, integral charger 10-30 V DC input, optional: solar panel
- Lowest power mode current 7 mA
- Over voltage and reverse polarity protected with self-resetting fuse
- Voltage of battery and charger input: monitored, logged, displayed, alarmed
- Vin cable length max. 3 m

Data Storage: Flash Memory

- Total 32 MB, of which 16 MB allocated to logged data/stored images (1,398,101 samples)
- Typical autonomy: 2 parameters logged every 15 minutes and battery voltage logged hourly will give almost 10 years of storage.

Status LEDs

- 1 LED for overall operational state
- 3 LEDs for status of communication devices (comms1, comms2, Wi-Fi)

Real-time Clock

- High accuracy, backed by on-board lithium battery to prevent loss of date/time

Environmental Conditions

- Enclosure: IP66, die-cast aluminium alloy, hard grey paint finish, neoprene gasket
- Operating temperature: -40 °F to +158 °F
- Storage temperature: -40 °F to +185 °F

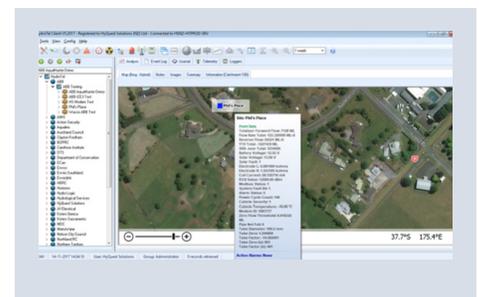
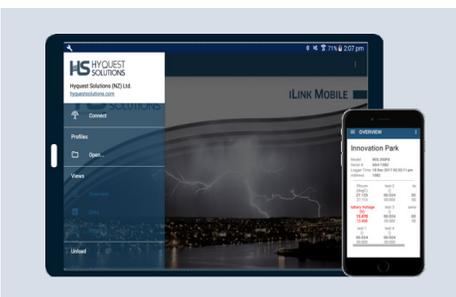
Size (WxHxD) and Mass

5.12 in x 8.66 in x 2.95 in (130 x 220 x 75 mm); 3.09 lb (1.4 kg)

Conformity / Compliance

RoHS, FCC, CE (WEEE pending)

Software: iLink & HydroTel™



Contact us

HyQuest Solutions America - KISTERS Group

3550 23rd Ave S. Suite 5
Lake Worth Beach, FL 33461

+1 (561) 459-4876
+1 (561) 582-0049

sales-hsa@kisters.net
www.hyquestolutionsamerica.com

