

Kingfisher LP-3 RTU

For monitoring, control and data logging applications



Intelligent management of power consumption allows the Kingfisher LP-3 Remote Telemetry Unit (RTU) to be used with battery or solar power sources.

A sleep-mode current draw of less than 1 mA minimises the size and cost of the required power systems.

A powerful solution for low-power monitoring, control and data logging applications.

The LP-3 cost-effectively opens up the world of high-tech communications and SCADA (supervisory control and data acquisition) functionality to practically all remote locations.

The LP-3 low-power RTU suits a wide range of applications including agriculture operations, environmental monitoring, gas metering, power metering and data logging. These smart, easy-to-use RTUs have ladder logic capability and highly flexible I/O and communication ports.

Very low power consumption is achieved using three modes; communication, scanning and sleeping. The RTU is packaged in a two-part, rugged plastic enclosure that houses the electronics and communication interfaces.

The LP-3 low-power RTU is compatible with the entire range of Kingfisher RTU products and is configured using Toolbox software from Servelec.

The LP-3 is compatible with virtually any SCADA system including Servelec's Scope5 solution through the use of a broad variety of industry-standard communications protocols.

KINGFISHER LP-3 RTU SPECIFICATIONS

Overview of specification

Full specification details are available in the hardware manual.

General

Input supply	9.0 - 15.0 V DC @2A max
Power consumption, I/O scan	<55 mA (option ports 3 & 4 not loaded)
Power consumption, sleeping	<2 mA via DC supply
Operating temperature range	-20 ° C to +70 ° C (excluding battery)
Operating humidity	5% to 98% R.H. non condensing
CPU	Hitachi H8S/2144 operating at 32KHz or 7.38MHz
Flash RAM	4Mb
Static CMOS RAM	4K internal, 512K external (battery backed)
Real-time clock	Yes
Battery backup for RAM & RTC	Yes, Lithium
Backup battery lifetime	7 years at 25 °C
Dimensions	185mm (H) x 130mm (W) x 50mm (D)
Comm Port 1	RS-232, 300 to 38,400bps non isolated
Comm Port 2	RS-232/RS-485, 300 to 38,400bps isolated
Comm Port 3 & Comm Port 4	Refer to list of card options below:
A3 Ethernet MTRJ Fiber	I Isolated Serial
D PSTN	L Private line 1200 Baud
F Serial Fibre	Rx Spread Spectrum
H HART	T3 Ethernet

Digital inputs

Number of inputs	8 Max. Channels 5 to 8 can be configured as digital outputs
Input voltage range	5 to 30V DC=ON; 0 to 1.0V DC = OFF

Digital outputs

Number of outputs	2 latching relays, plus up to 4 Open Drain (Channels 5 - 8)
Maximum voltage	Relays 30V AC/DC, Open Drain 30V DC
Maximum switching current	Relays 2A, Open Drain 300mA total
Isolation	500V (relay)

Analogue inputs

Number of inputs	4 plus (inc. battery. V, RTU current, RTU temp & ADC V Ref)
Input voltage range	0-5V (0-20mA with ext. 250 Ohm resistance)
A/D converter resolution	12 bit
Binary input range	0 to 32,760

Analogue output

Output range	1 x 0-5V, 4-20mA sink
D/A converter resolution	15 bit
Isolation	500V RMS

Certifications include

A-Tick	Comms options D, R1 and R2
C-Tick	Main module plus comms options A3, D, I, L, R2, R3, T3