

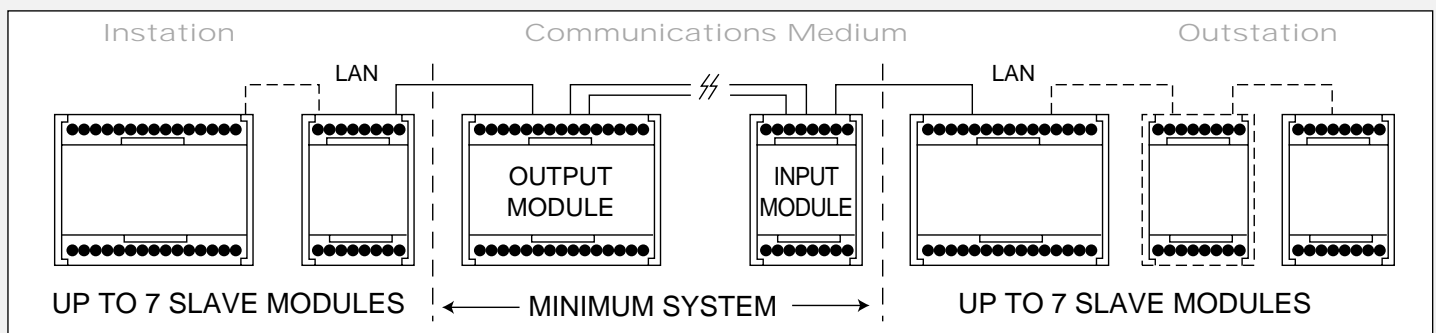
SiteLINK II is a high performance modular Point-to-Point telemetry system which is designed to transfer digital, pulse and analogue signals between two locations via a uni- or bi-directional serial data link using radio, fibre optics, microwave or dedicated lines as the communication media. SiteLINK II has been designed to meet the widest possible range of applications in the Utilities, Process and Manufacturing industries and can dramatically reduce the cabling costs associated with the monitoring and control of equipment at dispersed locations.



GENERAL

A SiteLINK II system comprises two main parts, an Instation and an Outstation. Inputs to the Instation are recreated as outputs at the Outstation and inputs at the Outstation are recreated as outputs at the Instation. Both the Instation and the Outstation can comprise one or more input and output modules or a combination of modules.

The SiteLINK II range of modules comprise Master and Slave, Input and Output modules which can be linked on a Local Area Network (LAN) at both the Instation and the Outstation to provide the required input/output capacity. A maximum of 8 modules (combination of Input and Output modules) can be connected at one location to accommodate a total of 64 input/output signals. A serial data port on the front of the Master input and output modules at each location connects to an external modem, line driver or radio.



INPUT MODULE

The Input module is powered from a 12 volt dc source which can be derived from an external power supply or a battery. Power supplies for external transducers, two wire transmitters and the digital and pulse input circuits are available from the Input module. The Input module can be configured to charge an external 12 Volt sealed lead acid battery which could support the operation of the input module, input circuits and communications equipment in the event of a mains power failure.

Battery powered Input modules can be set to operate in an intermittently powered mode to conserve the battery power, waking up at preset time intervals to power its external circuits, scan its inputs, transfer its input status and values via the data link and then return into a sleep mode.

The Input module has eight input channels of which channels 1 to 4 are digital (5V logic levels or volt free contact) inputs only, 5 and 6 can be nominated as either digital or analogue (4 to 20mA) and channels 7 and 8 as either digital or pulse inputs. The pulse inputs are only available on the continuously powered or master battery powered versions and have a maximum input of 10 pulses per second. Pulse inputs are not available on slave battery powered input modules as these modules are only powered up when they are polled by the master. Pulse inputs are still monitored in the master Input module even in sleep mode. A pulse input acts as an interrupt on the processor and is logged.

OUTPUT MODULE

The Output module has been designed to be mains (230/115 Volt 50/60Hz) powered again with eight channels which can be configured to match the inputs on the Input module. The digital outputs are SPCO relays rated at 5 Amps at 250 Volts AC, 30 Volt DC and the pulses are factory set at 30mS ON time with a maximum rate of 10Hz.

COMMUNICATIONS

Communications between the Instation and the Outstation can be via any dedicated serial link such as radio, fibre-optic, microwave, dedicated lines or private wires. Communications equipment including radios, line drivers and modems, and complete systems housed in environmentally protected enclosures can be supplied to meet your applications requirement.



INPUT MODULE

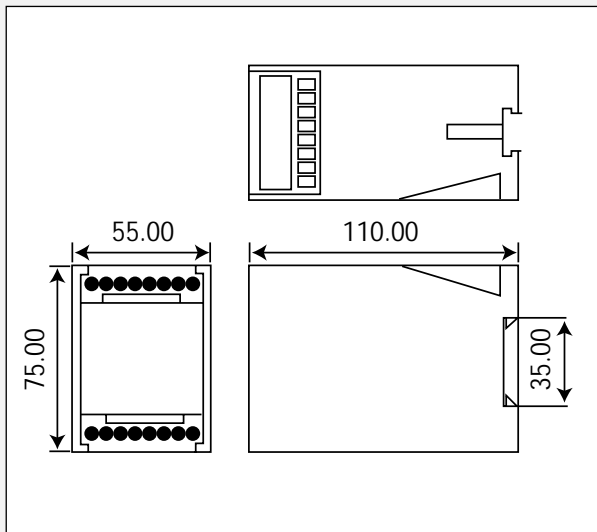
- * 12 volt dc powered, 300mA maximum (excluding power for the radio, modem, line driver, etc.) or 13.8 volt dc powered if battery charging required, or 12 volt dc battery powered
- * Sleep mode current consumption < 100µA
- * 8 input channels – various configurations
 - i) 8 digital inputs
 - ii) 6 digital and 2 analogue inputs
 - iii) 6 digital and 2 pulse inputs
 - iv) 4 digital, 2 analogue and 2 pulse inputs
 (iii & iv only available on continuously 12 volt dc powered or master battery powered modules)
- * Digital inputs either 5V logic or volt-free-contact (internal wetting voltage supplied)
- * Analogue inputs 4 to 20mA into 232 ohms
- * Transducer supply – 17 to 26 Volt DC 50mA max
- * Pulse inputs – maximum 10Hz, 5V or contacts

OUTPUT MODULE

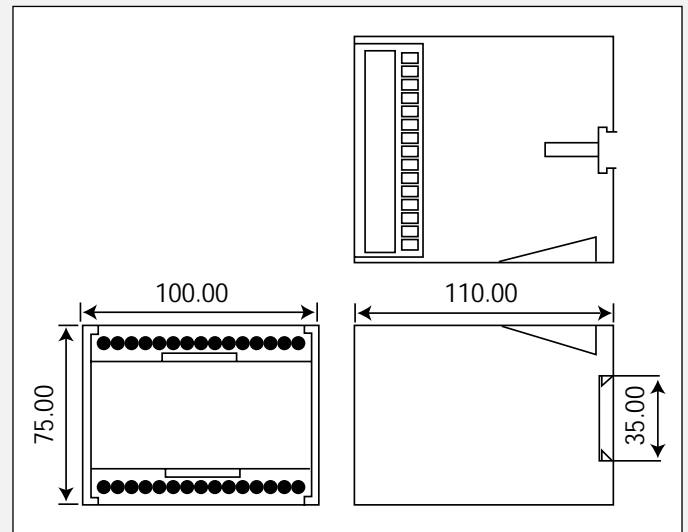
- * 115/230 Volt AC 50/60Hz powered
- * Power consumption 8VA maximum
- * 8 output channels – various configurations
 - i) 8 digital outputs
 - ii) 6 digital and 2 analogue outputs
 - iii) 6 digital and 2 pulse outputs
 - iv) 4 digital, 2 analogue and 2 pulse outputs
 (iii & iv only available if Input module is continuously 12 volt dc powered or master battery powered)
- * Digital outputs – SPCO relays rated at 5 Amps at 250 Volt AC, 30 volt dc
- * Analogue outputs – 4 to 20mA into 10 to 1000 ohms
- * Pulse outputs – opto-coupler 30mS ON time, 10Hz max 50 volt max @ 150mA

MECHANICAL DETAILS

INPUT MODULE



OUTPUT MODULE



ORDERING DETAILS

- 1) Specify number of master and slave input and output modules required
- 2) Specify if input modules are to be 12 volt dc or battery powered
- 3) If Input module is battery powered specify wake up time, i.e. 1 hour (factory set to 15 minutes if not specified)
- 4) Specify channel configuration required, i.e. 6 digital and 2 analogue inputs/outputs
- 5) Specify digital input type, i.e. volt free contact or 5V logic level
- 6) Specify communications medium to be employed, i.e. Radio link
- 7) Specify if Lee-Dickens to supply modules housed in an enclosure
- 8) Specify if Lee-Dickens to supply radios, line drivers or modems as well