

## ADVANCED 3-PHASE AC CURRENT MONITOR w/ RS-485 OUTPUT

### FEATURES:

- ◆ True RMS, 0.1% accuracy.
- ◆ Supports a wide variety of solid core and split core CTs.
- ◆ Modbus/RS-485 communication (up to 63 devices per chain).
- ◆ Customizable scaling, filtering, Modbus map, and serial settings.
- ◆ Compact Size, Easy Wiring, DIN Mounting.
- ◆ Ideal for Control and Energy Management Applications.



### APPLICATION:

The i-Spy transducer offers inexpensive yet accurate true RMS monitoring of AC current in three independent circuits or one three-phase circuit.

This unique product is ideal as a precision AC load monitor for Control and Energy Management applications.

The i-Spy combined with inexpensive current transformers provides a convenient tool for accurate load monitoring in any electrical equipment.

### SPECIFICATIONS:

<b>Power Req.:</b>	12–30 VDC/VAC
<b>Current Inputs:</b>	5A CTs MCT/MSCT — Elkor solid/split core current transformers 333mV CTs
<b>Output:</b>	RS-485 digital communication port. Up to 63 devices per line. Modbus RTU (functions 3, 4, 6, 8, 11, 16, 17, 22, 23 and 43) Baud rates: 9600 (default), 19200, 38400, 57600 Parity: None (default), odd, even Stop bits: 1 (default), 2 Data Width: 8
<b>Accuracy:</b>	TRMS, 0.1% of reading, output resolution of up to 20 bits Bandwidth up to 2 KHz
<b>Environment:</b>	-40°C to 70°C, RH 90% non-condensing
<b>Indication:</b>	Status — bicolour green/red LED Transmit/receive — bicolour red/green LED Current — 3 bicolour red/green LEDs (one per phase)
<b>Mounting:</b>	DIN Rail — universal DIN attachment mounted on the back of enclosure; dim. h=3.75" w=2" d=2.25" (95x50x60mm).

### PRODUCT DESCRIPTION:

The i-Spy is a microprocessor-based precision current monitor that performs true RMS current measurements in one three-phase circuit or in three independent AC loads. This device is backwards-compatible with existing ETA3.RTU transducers.

It is available in 5A, 333mV and mA input versions. As such, it supports a wide variety of current sensors including split and solid core CTs.

The i-Spy measures true RMS current in three input channels and makes the data available via Modbus/RTU (RS-485). User configurable scaling factors may be applied to the measured values for ease of use and compatibility. Proprietary noise filtering expands the dynamic range of the device and improves the accuracy and stability of readings at low currents.

Baud Rate (up to 57,600), parity, and stop bit settings may be user configured. The Modbus device address is set via an on-board DIP switch (up to 63). Modbus data registers are available in 16-bit integer, 32-bit integer, and 32-bit floating-point formats with configurable scaling, and the register layout may be user-adjusted for efficiency or compatibility with other devices.

The i-Spy is powered by 12-30 VAC/VDC. The unit is housed in a universal DIN mount enclosure and features screw-type terminal blocks for easy field wiring.