

DIN 96x48mm DC AMPERE HOUR METER WITH RELAY OUTPUTS, ANALOGUE OUTPUT, RS485

TYPE: CS2-TM

PRODUCT
GROUP
DD

■ Features

- Separate totalising display
- Separate batch count display
- 3 volt free control inputs
- Up to 4 relay outputs
- CE marked
- Ideal product for electroplating applications

■ DESCRIPTION

A Din 96x48mm DC Ampere Hour meter, taking a current reference from a DC shunt and integrating this reference against time to achieve an Ampere Hour or Ampere Minute reading. There are two display screens, the main ten digit screen is the totaliser display, the other screen is a "Batch" programmable setting. The meter can be specified with up to four relay outputs (2C/O and 2N/O) which can be assigned at the time of ordering for many functions to control say an electroplating system. As an option RS485 MODBUS is also available. Three volt free control inputs are featured as standard for functions such as reset. **Please discuss your exact requirements with our technical sales department.**



■ SPECIFICATIONS

GENERAL

Accuracy:	≤ ±0.4% of FS
DC current input:	Via a 50mV, 60mV or 100mV shunt
Sampling rate:	15 cycles/Sec
Response time:	≤100mSec
Display:	7.1mm high LED's Top row 10 red digits Bottom row 6 red digits
Status LED's:	4 square LED's to indicate outputs
Over-range indication:	"ovFL" displayed when input is over 120% of input range
Under-range indication:	"-ovFL" displayed when input is under -20% of input range
Power consumption:	5VA / 5W
Operating temperature:	0-60°C
Operating relative humidity:	20-95% RH
Temperature coefficient:	≤50 PPM/ °C
Storage temperature:	-10°C to +70°C
Dielectric strength:	AC 2.0KV for 1 min between input, output/s, power & case
	IP54

Protection:

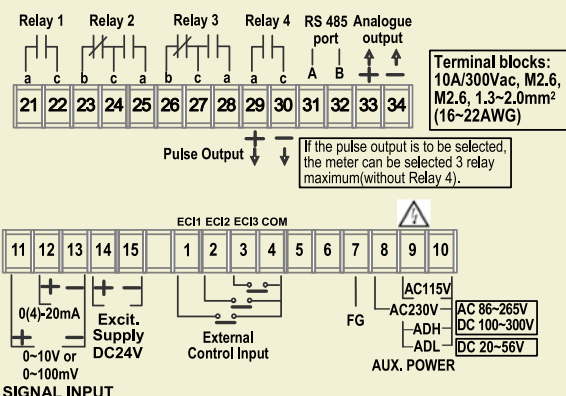
OPTIONAL RELAY OUTPUT

Latching:	Optional please specify
Number of setpoints:	Up to 4
Energisation functions:	Start delay / Energisation & de-energisation delay / Energisation latching / Hysteresis
Time delay programmable:	0-9 mins 59.9 secs
Relay contacts:	Relays 1 & 4: 2xNO 1A/230VAC, 3A/115VAC Relays 2 & 3: 2xCO 1A/230VAC, 3A/115VAC

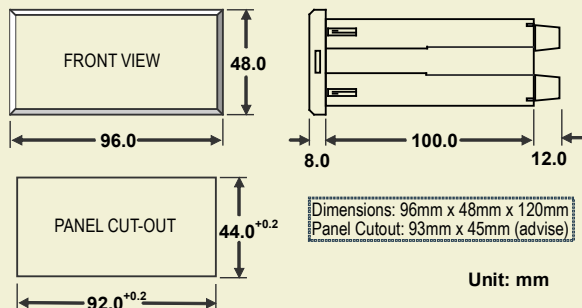
OPTIONAL RS485 COMMUNICATIONS:

Protocol:	MODBUS RTU
Baud rate programmable:	1200 / 2400 / 4800 / 9600 / 19200 / 38400
Data bits:	7 or 8 bit programmable
Parity programmable:	Even, odd or none (with 1 or 2 stop bit)
Address programmable:	1-255 programmable
Distance:	1200 Metres
Terminal resistor:	150 Ohm at last unit

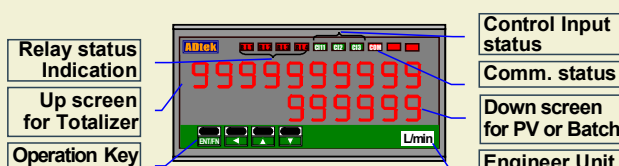
CONNECTION DIAGRAM



DIMENSIONS



FRONT PANEL



■ ORDERING INFORMATION (The meter will be scaled and set exactly to your requirements)

	INPUT	RELAY OUTPUT	ANALOGUE OUTPUT	RS485	AUX. POWER
CS2-TM	xxx/50mV xxx/60mV xxx/100mV	None 2 Relays* 3 Relays* 4 Relays*	0-5VDC 0-10mA 1-5VDC 0-20mA 0-10VDC 4-20mA 2-10VDC Specify	None Yes	115 / 230VAC 20-90V ACDC 85-264V ACDC

* Regarding the relays, specify your exact requirements of relay configuration at the time of ordering, along with any extra functions such as latching or time delays.

Tel: 0161 626 5316 / 01276 25858

www.foxtamcontrols.co.uk