Function: The 500 Series comprises precision electronic instruments containing a multi-functional analogue computing circuit which is factory calibrated for one of the following functions:

M500	=	Multiplier	Output	= input A x input B
D500	=	Divider	Output	= input A ÷ input B
SRE500	=	Square Root Extractor	Output	= $\sqrt{A}$
SQ500	=	Squarer	Output	= input A^2
L500	=	Log Amplifier	Output	= Log input A (1 to 3 decades)
AL500	=	Antilog Amplifier	Output	= Antilog input A (1 to 3 decades)
RW500	=	Rectangular Weir Lineariser	Output	= input $A^{3/2}$

SPECIFICATIONS

Please note that the following are typical standard ranges. We will manufacture instruments to cater for other ranges too, within certain limitations. Please contact our internal sales department for further clarification.

INPUTS:

DC Current
0 to 1mA into 1K ohms
0 to 10mA into 100 ohms
4 to 20mA into 62.5 ohms
10 to 50mA into 25 ohms
Other current inputs as required
Minimum current 1mA
Maximum current 100mA

DC Voltage
0 to 1 Volt DC into 200K ohms
1 to 5 Volt DC into 1M ohms
0 to 10 Volt DC into 2M ohms
Minimum voltage span 1 Volt
Maximum voltage span 10 Volts

OUTPUTS:

DC Current
0 to 1mA into 10 to 20K ohms
1 to 5mA into 10 to 4K ohms
0 to 10mA into 10 to 2K ohms
4 to 20mA into 10 to 1K ohms
Minimum span 1mA
Maximum span 20mA

DC Voltage
0 to 1 Volt DC into 100 ohms min
0 to 5 Volt DC into 500 ohms min
0 to 10 Volt DC into 1K ohms min
Minimum span 1 Volt
Maximum span 10 Volts

Load Stability
Less than 0.02% of span over the load range specified

SUPPLY:

Power Supplies
100 to 120 Volt 50/60 Hz
200 to 240 Volt 50/60 Hz
or 24 Volt DC transformer coupled inverter to maintain signal to power supply isolation

Power Required
3 Watts Maximum

Pilot Light
Green LED shows Power ON

GENERAL:

Linearity Error

M500	±0.5% of output span
D500	±0.2% with input B at 100%
SRE500	±0.1% at 100% output span
	±0.4% at 10% output span
SQ500	±0.5% of output span
L500	±0.5% of output span
AL500	±0.5% of output span
RW500	±0.5% of output span

Temperature Coefficient
±0.1% of span/⌓ 10ºC

Operating Temperature Range
0 to +50ºC

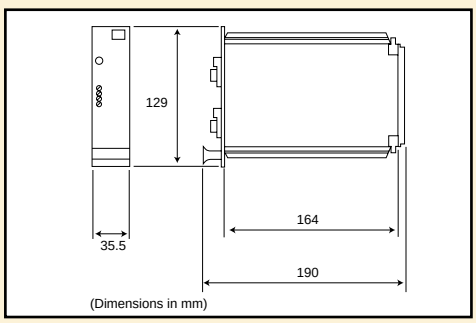
Storage Temperature Range
–20 to +85ºC

Operating Humidity Range
0 to 95% RH non-condensing

Storage Humidity Range
0 to 95% RH non-condensing

Weight
500 Series 300 gms

MECHANICAL DETAILS



(Dimensions in mm)

TERMINATION DETAILS

Termination details are dependent upon input type and upon type of housing chosen (19" rack or DIN rail mounting enclosure) and, if 19" rack, screw terminals or solder terminals. Further details upon request from our internal sales department.

ORDERING DETAILS

(a) Give identification code, i.e. M500
(b) Give power supply voltage, i.e. 240 Volt 60 Hz
(c) Give all details of input signal (or signals if M500 or D500), i.e. 2 x 4 to 20mA
(d) Give details of output signal, i.e. 4 to 20mA
(e) For L500 or AL500 please specify number of decades

LEE-DICKENS LTD
Desborough, Kettering, Northants NN14 2QW U.K.
Tel: (01536) 760156 Fax (01536) 762552