

Signal Integrator EI400

Function: The EI400 is a precision electronic instrument for the integration of varying electrical quantities against time, giving a 24 Volt DC pulse output suitable for driving electronic or electro-mechanical impulse counters and a volt free contact reed relay output. We can supply a range of suitable electro-mechanical counters. Normally these counters are mounted remotely but if required we can supply a separate 14E wide x 3U high 19" rack front panel that has a suitable cut-out for the relevant counter already punched.

Options on the EI400 include: a low signal cut-off (pulse output is inhibited below a cut-off level adjustable between 0 and 20% of the input span).

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

Between 0 and 250 Volts DC
Minimum voltage span 1V
Maximum voltage span 250V

Input Impedance

1M ohms or greater

OUTPUTS:

Output Pulse

- 1) 24 Volt DC, 40mS wide derived from an open collector and internal supply
- 2) Reed relay, volt free, normally open contact – rated 100 Volt DC at 100mA
This output can only be used for low count rates – i.e. less than 3,000 counts per hour (50 counts per minute)

Output Count Rate

Minimum 10 counter per hour
0.2 counts per minute
Maximum 20,000 counts per hour
335 counts per minute

SUPPLY:

Power Supplies

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

Power Required

3 Watts Maximum

Pilot Light

Green LED shows Power ON

ELECTRO-MECHANICAL COUNTERS:

We can supply the following types of electro-mechanical counters if required:

- 1) 8 Digit non-reset 24V DC
- 2) 6 Digit manual reset 24V DC
- 3) 5 Digit predetermining manual reset 24V DC

Option:

Electro-mechanical counter can be mounted in a separate double width (14E wide) panel to mount in the same sub-rack as the EI400

GENERAL:

Linearity Error

Analogue input to pulse rate, better than 0.1%

Temperature Coefficient

±0.1% of span/△ 10°C

Operating Temperature Range

0 to +50°C

Storage Temperature Range

-20 to +85°C

Operating Humidity Range

0 to 95% RH non-condensing

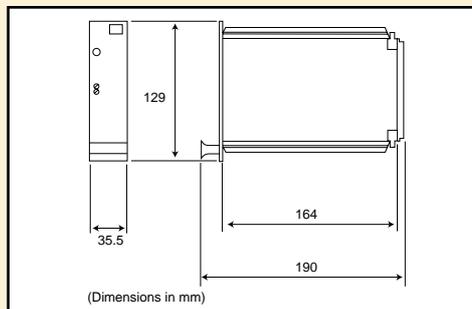
Storage Humidity Range

0 to 95% RH non-condensing

Weight

EI400 305 gms

MECHANICAL DETAILS



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. EI400
- (b) Give power supply voltage, i.e. 240 Volt 60 Hz
- (c) Give all details of input signal, i.e. 4 to 20mA
- (d) Give details of output count rate required, i.e. 0 to 5,000 counts per hour
- (e) Give details of electro-mechanical counter required (if required), i.e. 8 digit non-reset 24 Volt DC