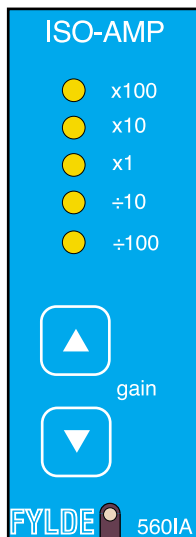


## FE-560-IA Isolation Amplifier



Front panel shown actual size

Power Line Monitoring

Ground Loop Elimination

Current Shunt Measurements

Oscilloscope front end

The FE-560-IA is an Isolation Amplifier in the FYLDE "blue panel" modular range of signal conditioning, and is a general purpose isolation amplifier for front end use when hazardous voltages must be measured.

Voltage isolation is up to 1500 V DC or pk\*

FYLDE offer a choice of input connectors including the "Protection" BNC connector (rated at 1000 V pk) or alternative Lemo plastic bodied 2 pin.

The amplifier is fully protected using advanced depletion mode FET devices and has a gain range of 1/100 up to x100.

The amplifier has additional on card controls for AC/DC coupling and low pass filter roll off adjust.

The module may be housed in the "PE" range of enclosures starting with the FE-PE2 for 2 channels up to the FE-PE17 for a maximum of 16 amplifiers.

Power source is either 115 or 230V 50/60Hz and a DC power option is available.

\* May be limited by input connector choice.

|                    |   |   |
|--------------------|---|---|
| ISOLATION          | Voltage<br>Capacitance<br>Resistance<br>Mode Rejection<br>Leakage Current | >1500V dc or peak* (tested 5s @2500V).<br>15pF.<br>>50 x 10 <sup>9</sup> ohms.<br>>150dB** (dc to 60Hz). S/C source.<br>< 2μA RMS at 230V RMS 50Hz. |
| GAIN               | Switched<br>Linearity<br>Accuracy<br>Temp.Coefficient<br>Stability        | ÷100, ÷10, x1, x10, x100<br>±0.02% FS.<br>±0.25 % of gain setting.<br>< 0.01% per °C.<br>< 0.1% change over 12 months.                              |
| FREQUENCY RESPONSE | Internal AC coupling  | DC - 50kHz (3dB).<br>1.6Hz (-3dB) Factory fitted option.  |
| INPUT              | Voltage<br>Protection<br>Offset Voltage / TC<br>Impedance<br>Noise        | Maximum 1000V DC or Pk*<br>Against incorrect gain setting up to Maximum input.<br><200μV / <10μV/°C RTI.<br>>1M Ω.<br>< 20μV pk-pk dc-20kHz RTI.    |
| FILTER             | Internal Low Pass filter<br>Setting                                       | 3 pole Butterworth (60dB/decade).<br>50Hz to 50kHz by plug in Resistor network.   |
| OUTPUT             | Voltage Range<br>Noise / offset<br>Offset Temp Coefficient                | ± 10V nominally (min ±9.8V) @ ± 2mA.<br><1mV RMS DC-20kHz / <±15mV<br>< 1mV/°C.   |
| TEMPERATURE RANGE  |   | 0 - 50°C.   |
| POWER SUPPLY       | Requirement   | 200-250V 50Hz standard. 100-125V 50/60Hz to order.<br>11-14VDC by FE-605-DCC fitment.   |
| CONNECTOR          |   | 25 way 0.1" pitch edge connector.   |
| MECHANICAL         | Dimensions / weight   | panel 2.75" x 1", overall depth 8.2" / 200gm  |
| HOUSING            |   | 2 modules fit FE-PE2. 4 modules fit FE-PE4<br>8 modules fit FE-PE8. Up to 16 in FE-PE17(RK)<br>RK= Rack Mount                                       |
| PRESENTATION       |   | Blue front panel 2.75" x 1".<br><br>* depending on I/P connector choice<br>**gain x100  |