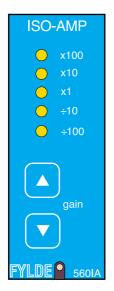


FE-560-IA Isolation **Amplifier**



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 >1500V dc or peak* (tested 5s @2500V).

Capacitance 15pF.

Resistance >50 x 10⁹ ohms.

Mode Rejection >150dB** (dc to 60Hz). S/C source. Leakage Current $< 2\mu$ A RMS at 230V RMS 50Hz.

GAIN Switched ÷100, ÷10, x1, x10, x100

Linearity $\pm 0.02\%$ FS.

Accuracy ±0.25 % of gain setting. Temp.Coefficient <0.01% per °C.

Stability < 0.1% change over 12 months.

FREQUENCY RESPONSE DC - 50kHz (3dB).

Internal AC coupling 1.6Hz (-3dB) Factory fitted option.

INPUT Voltage Maximum 1000V DC or Pk*

Protection Against incorrect gain setting up to Maximum input.

Offset Voltage / TC $<200\mu\text{V}$ / $<10\mu\text{V}/^{\circ}\text{C}$ RTI.

Impedance $>1M \Omega$.

Noise $< 20\mu\text{V}$ pk-pk dc-20kHz RTI.

FILTER Internal Low Pass filter 3 pole Butterworth (60dB/decade).

Setting 50Hz to 50kHz by plug in Resistor network.

OUTPUT Voltage Range \pm 10V nominally (min \pm 9.8V) @ \pm 2mA.

Noise / offset <1mV RMS DC-20kHz / <±15mV

Offset Temp Coefficient < 1mV/°C.

TEMPERATURE RANGE 0 - 50°C.

POWER SUPPLY Requirement 200-250V 50Hz standard. 100-125V 50/60Hz to order.

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

8 modules fit FE-PE8. Up to 16 in FE-PE17(RK)

RK= Rack Mount

PRESENTATION Blue front panel 2.75" x 1".

* depending on I/P connector choice

**gain x100