



## Ultra-low Frequency Charge Amplifier

**Model YE5850**

### FEATURES

- Ultra-low frequency measurement (down to 2  $\mu$  Hz)
- High current output (up to 100mA)
- Wide frequency bandwidth and high input impedance
- Three digit dial-in transducer sensitivity
- Multiple Integrated low pass and high pass filters
- Both charge and voltage inputs
- Internal polarisation switch
- Overload indicator



### SUPPLIED WITH

Input cable	2 meter STYV-1 low noise cable fitted with L5 connectors, 2 meter STEF0.9 low noise cable
Output cable	2 meter BNC cable
Power supply cable	both AC and DC cables

### PERFORMANCE

Input voltage range	-10V to +10V peak
Input charge range	10 <sup>6</sup> pC
Equivalent DC resistance	10 <sup>14</sup> $\Omega$
Output voltage	$\pm$ 10V peak
Output current	$\pm$ 100mA
DC offset	$\pm$ 10mV
Loading impedance	$\geq$ 100 $\Omega$
Noise	$\leq$ 30 $\mu$ V referred to input at maximum sensitivity
Gain settings	0.01; 0.1; 1; 10; 100; 1000mV/pC with transducer capacitance 1nF
Accuracy	$\leq$ $\pm$ 1% at 20°C $\pm$ 2°, 45-75% RH, >10k $\Omega$ loading, AC 220V $\pm$ 2%, DC $\pm$ 18-21V $\leq$ $\pm$ 2% at 0°C-40°, 20-90% RH, >100 $\Omega$ loading, AC 220V $\pm$ 10%, DC $\pm$ 18-27V
Low-pass filters	0.3kHz, 1kHz, 3kHz, 10kHz, 30kHz, 100kHz with cutoff frequency of -3db $\pm$ 1db and attenuation -12dB/oct
High-pass filters	3Hz, 0.3Hz, 0.03Hz, and 0.003Hz. (M, L options referring to user manual)

### PHYSICAL CHARACTERISTICS

Dimensions	80mm(W) $\times$ 122mm(H) $\times$ 200mm(D)
Weight	1.5kg
Electrical connection	L5 socket for input, BNC jack for output

### ENVIRONMENT CHARACTERISTICS

Operating temperature	0°C to 40°C
Storage temperature	-55°C to 85°C
Maximum humidity	95% RH