

# EM-95 8-CHANNEL GALVANIC ISOLATOR & SIGNAL CONDITIONER



## FEATURES:

- 8-channels
- three way isolated
- multiple operating ranges
- two frequency ranges
- dip-switch settable ranges
- high 12-bit accuracy
- wide operating voltage range
- incorrect polarity protected input
- over current protected output
- small size

## USAGE:

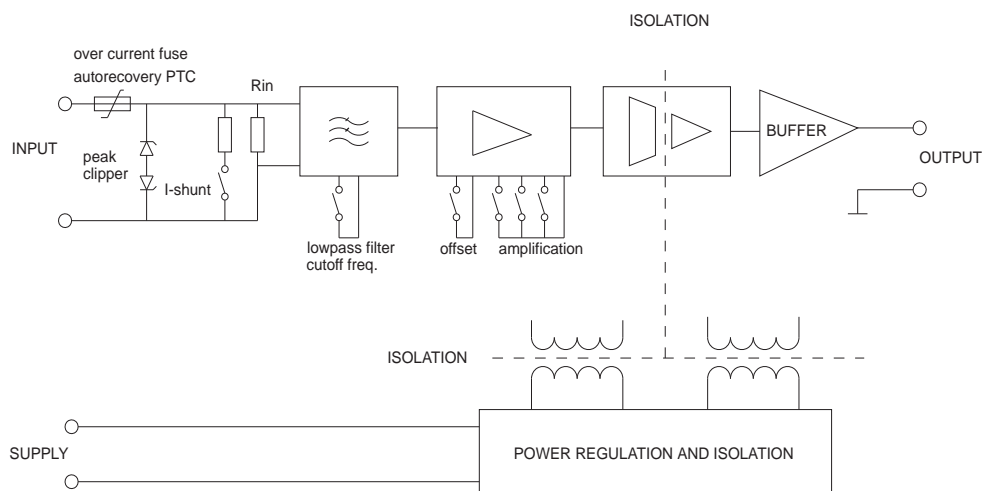
- signal galvanic isolation
- signal conditioning
- ripple filter
- interfacing PC-input card

EM-95 8-channel galvanic isolator is designed for input in interfacing PC-input card. The input, output and supply input are galvanically isolated. All 8 channels are also isolated from each other, outputs share gnd.

The signal input can be to common current- and voltage signals. Settings are done easily with dip-switches. There are two frequency ranges, which can also be set with dip-switches.

Linearity and resolution extends to systems up to 14-bit, whereas the absolute precision up to 12-bit systems.

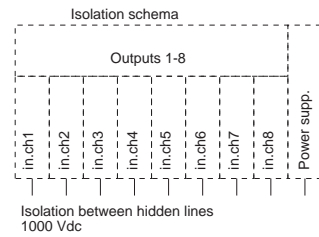
The signal input is over current and voltage peaks protected. The signal output is short circuit protected and current limited so the device won't damage the measuring card in situations with faulty connections.



# EM-95 INSTRUCTIONS

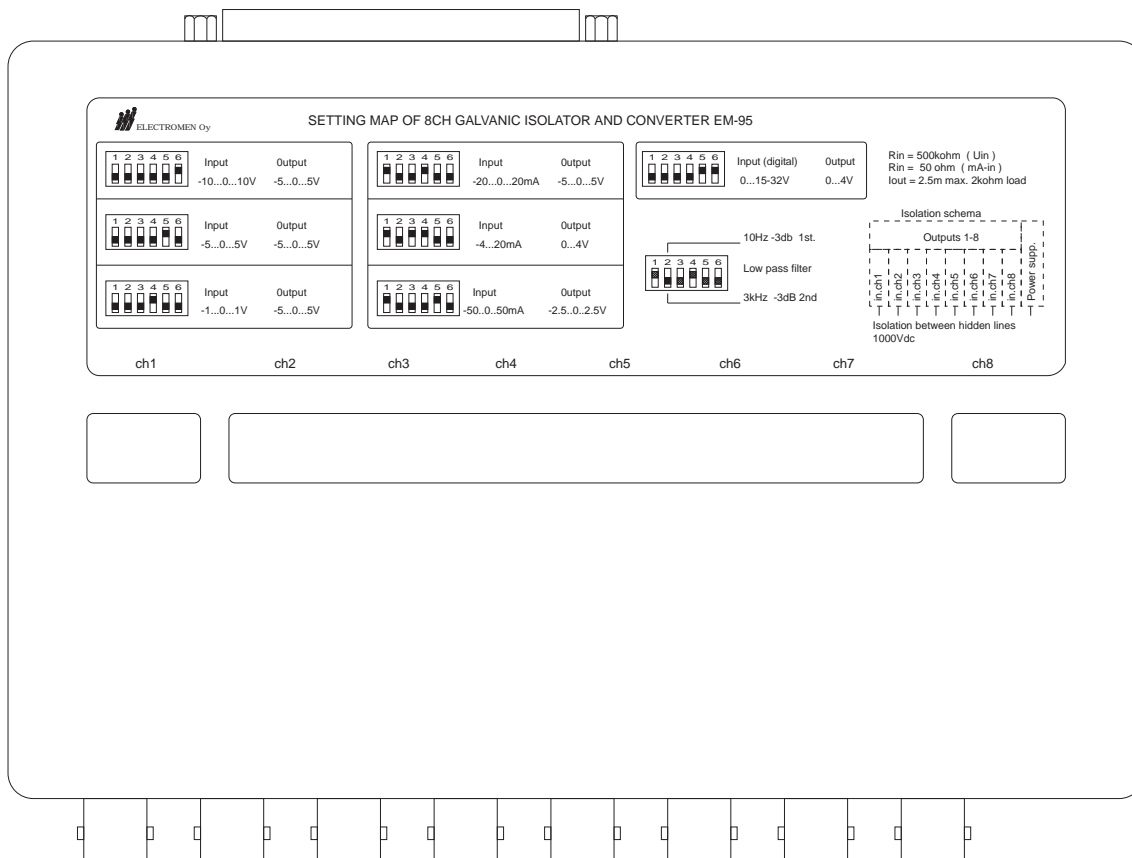
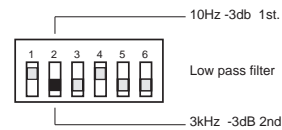
## SETTING INPUT AND OUTPUT RANGES

Each channel is set individually with a DIP switch. All the 8-channels are galvanically isolated from each other and from the power supply.

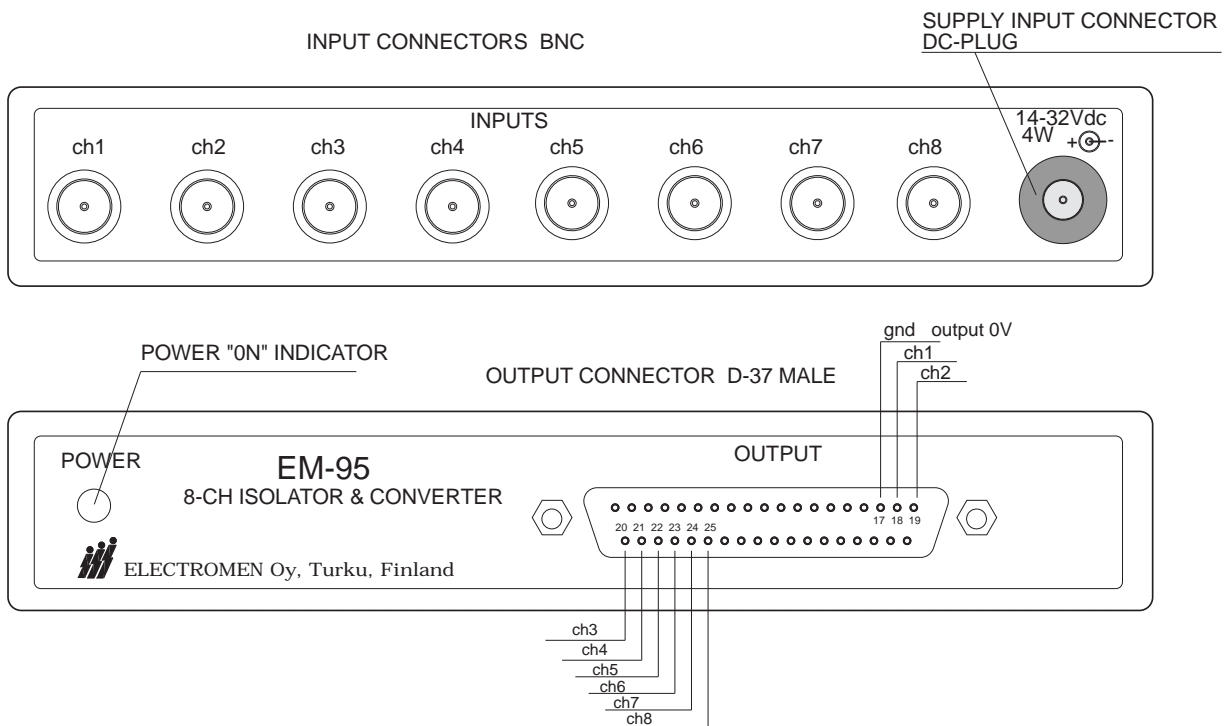


## SETTING LOW PASS FILTER

All the 8-channels have individual low pass filter setting. The filter setting doesn't affect to the selected input / output setting.



# EM-95 SPECIFICATIONS



## TECHNICAL DATA

Supply voltage	14...32Vdc
Current consumption	250mA @ Vs 14Vdc 140mA @ Vs 32Vdc
Input ranges	-10...0...10V ( Rin 500kohm ) -5...0...5 ( Rin 500kohm ) -1...0...1 ( Rin 500kohm ) -50...0...50mA ( Rin 50ohm ) -20...0...20mA ( Rin 50ohm ) 0...20mA ( Rin 50ohm ) 4...20mA ( Rin 50ohm ) 0>15-35V ( Rin approx 10kohm )
Input voltage limit	±50V ( RMS )
Input current limit	±100mA ( Fused )
Output range	-5...0...5V
Output current	max. 5mA
Frequency ranges	0...10Hz -3dB 1st degree filter 0...3kHz -3dB 2nd degree filter
Linearity error	0.02%
Gain error	0.06%
Gain drift	0.005% / °C
Zero error	±2mV
Zero drift	0.1mV / °C
Output ripple	900µV RMS ( 0...20kHz )
Insulation	1000V
Housing	Plastic / aluminum IP20
Dimensions	180x120x40mm
Oper. ambient temp	0...50°C

