DA-710A

DC Amplifier



Insulation type DC amplifiers with 2 channels

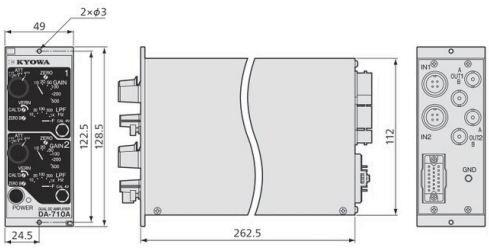
- Channels: 2
- Voltage calibration function
- I/O isolated between each channel
- Low-pass filter
- Allowable common mode voltage: ±300 V
  Allowable max. input voltage: ±110 V

These are insulation-type DC amplifiers with an integrated 2-channel amplifier.
Their I/O is insulated between each channel, ensuring excellent safety and significantly reducing noise impact.
They also include a low-pass filter, enabling measurements with an excellent SN ratio.

Specifications

Channels	2
Input Modes	Differential, isolated between input and output, and between channel and channel
Isolation Methods	Optical
Input Impedance	10 MΩ + 10 MΩ or more (ATT ×1 and OFF)
	1 MΩ + 1 MΩ or more (ATT × 1/100)
Gain	13 steps of 10, 20, 50, 100, 200, 500 (×1 and × 1/100) and OFF;
	continuously variable between ×1 to ×2.5 or more
Gain Accuracy	±0.1% (ATT ×1)
	±0.3% (ATT × 1/100)
Stability	Zero Balance: Within ±5 μV_{RTI}/°C
	(With input shorted and gain 500)
	Gain: Within ±0.02%/°C
Nonlinearity	Within ±0.05% FS
Frequency Response	DC to 10 kHz (+1, -3 dB)
Output A	±10 V (Load resistance 10 kΩ or more)
Output B	±10 V (Load resistance 10 kΩ or more)
Output Impedance	1 Ω or less
CMRR	120 dB or more (DC to 60 Hz)
	(With balanced input of 1 kΩ, gain 500 and ATT ×1)
Allowable Common Mode Voltage	
	±300 VDC or AC peak
	Insulation resistance 1000 MΩ or more
Allowable Max. Input Voltage	
	±2 VDC or AC peak (ATT × 1)
	±110 VDC or AC peak (ATT ×1/100)
Zero Balance Adjustment Range (Output)	
	±5 V (OUT A and B linked)
	±1 V (OUT B independent)
Noise	10 $\mu V_{p\text{-}p}$ (RTI) + 6 $mV_{p\text{-}p}$ (RTO)
	(With input shorted, gain 500 and ATT ×1)
Calibration Voltage (Output)	
	Within 4 V ±0.2%
Settling Time	100 μs or less, output: Within ±0.1%
Overload Recovery Time	100 μs or less, output: Within ±0.1%
Crosstalk Between Channels	
	10 $\mu V_{p\text{-}p}$ (RTI) + 6 $mV_{p\text{-}p}$ (RTO) or less
Common Mode Crosstalk Rejection Ratio	
	10 $\mu V_{p\text{-}p}$(RTI) + 6 $mV_{p\text{-}p}$ (RTO) or less
LPF	Transfer characteristic: 2nd order Butterworth
	Cutoff frequencies: 10, 30, 100, 300, 1 k Hz and FLAT (6 steps)
	Amplitude ratio at cutoff point: -3 ±1 dB
	Attenuation: (-12 ±1) dB/oct.
Operating Temperature	-10 to 50°C
Operating Humidity	20 to 80% (Non-condensing)
Storage Temperature	-20 to 70°C
Storage Humidity	5 to 95% (Non-condensing)
Withstand Voltage	Between [Channel 1 input connector pin] and
	[Output, case, AC power supply]:
	1 kVAC for 1 min
	Between [Channel 2 input connector pin] and
	[Output, case, AC power supply]:
	1 kVAC for 1 min
	Between [AC power supply] and [Output, case]:
	1 kVAC for 1 min
	Between [Channel 1 input] and [Channel 2 input]:
	1 kVAC for 1 min
Power Supply	100 VAC, 4.5 VA
Dimensions	49 W × 128.5 H × 262.5 D mm
	(Excluding protrusions)
Weight	Approx. 1.0 kg

Dimensions



Standard Accessories Input cable U-108
Output cable U-63
AC power cable P-25 (With 2-pin conversion plug CM-52)
Miniature screwdriver
CD-R (Instruction manual)
Simplified manual

Optional Accessories Housing case YC-A
Amplifier stand FA-1B