

Ultra-highly Sensitive, Super Compact, but Ultra-low Price Galvanometer Amplifier for Use in Picoampere Measurements

T-IVA001S

Features

With a skillful circuit design and intelligent selection of the parts used, the product was designed to be compact but of high performance at a low price.

Utilizes a low input bias operational amplifier and high-precision resistor. For use in very accurately converting ultra-low current at the picoampere level into voltage. Supports a direct current power supply, and thus boasts a high SN ratio. Use of batteries as the power supply enables further reductions in the noise level. The input is appropriately protected, thus eliminating any concern.



Rear Panel

Specifications

Number of Channels	1
Current Voltage Conversion Rate	1GΩ
Conversion Rate Accuracy	Within $\pm 1\% \pm 1\text{pA}$ (25°C or less)
Frequency Property	DC ~ approx. 45Hz
Output Voltage Temperature Drift	approx. 0.5 mV/45°C (no input current, input shield, power supply voltage of 30V)
Noise Output	approx. 200μVrms (conversion resistance 1 GΩ, no input current, input shield)
Max. Output Voltage	approx. $\pm 12\text{Vp}$ (power supply voltage of 30V)
Max. Output Current	$\pm 10\text{mA}$ [recommended output current: $\pm 100\mu\text{A}$ or less]
Output Resistance	50Ω
Power Supply	DC 8 ~ 30V (Circuit GND the middle voltage of external power supply, and not isolated)
Consumed Current	approx. 6mA (power supply voltage 10V), approx. 7.6mA (power supply voltage 30V)
Operating Temperature	5°C ~ 45°C [recommended operating temperature: 25°C or less]
Dimensions	80 (w) x 35 (h) x 75 (d) mm (protrusions such as connectors not included)
Weight	approx. 200g (connection cables not included)

Accessories	Cable for Dry Batteries (006P, 9V, 6F22, 6LR61, 6LF22)	1 set
	Power Supply Cable with Plug	1 set
	Case Feet	1 set

Both the specifications and usage are subject to change from improvements. Free warranty period of 6 months.

We contract the development, design, and manufacture of various systems using electronic and computer technologies.



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