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GL7-HV High Voltage Amp Module

Supports Up to 1000V

Maximum Sampling at 1MS/s (1µs)

Real-time RMS Measurement

- *GL7-HV supports 2V to 100VFS signals. Between the two channels, point-to-point voltage differential can max out at 1000Vp-p.*

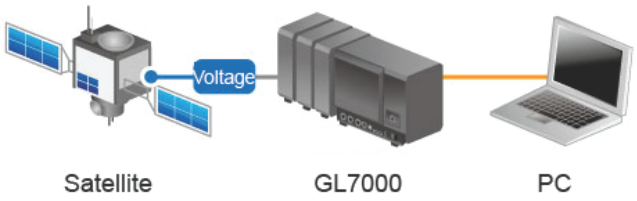
- *16-bit resolution offers more accurate measuring data points for faster sampling.*

GL7-HV (High Voltage Module) specifications

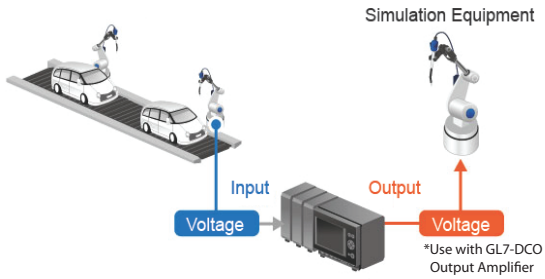
Item	Contents
Input ch number	2 ch/1 module
Input terminal shape	Insulated BNC Connector
System	All ch insulation, simultaneous sampling, unbalanced input
Sampling interval	1, 2, 5, 10, 20, 50, 100, 200, 500 usec, 1, 2, 5, 10, 20, 50, 100, 125, 200, 250, 500 msec, 1, 2, 5, 10, 20, 30 sec, 1, 2, 5, 10, 20, 30 min, 1hour
Built-in RAM	2,000,000 data
Input coupling	DC, AC, DC-RMS, AC-RMS
Measurement range	DC, AC : 2, 5, 10, 20, 50, 100, 200, 500, 1000V F.S. DC-RMS, AC-RMS : 1, 2, 5, 10, 20, 50, 100, 200, 500Vrms F.S. Crest Factor: (Range between 1and 200Vrms) 4 or less (Range of 500Vrms) 2 or less
Measurement accuracy (23°C±5°C) * 30 minutes more after power-up GND connection Filter Line (DC only)	DC, AC : ±0.25% of F.S. DC-RMS: Sine wave ±0.5% of F.S. (20Hz≤F≤1kHz) ±1.5% of F.S. (1kHz<F≤20kHz) AC-RMS: Sine wave ±0.5% of F.S. (100Hz≤F≤1kHz) ±1.5% of F.S. (1kHz<F≤20kHz) Response time: 500ms or less (Crest Factor 4 or less)
A/D converter	System: sequential comparison system Resolution: 16-bit Effective Resolution(DC,AC) : Approx. ±Range 1/40,000 (DC-RMS,AC-RMS) : Approx. Range1/20,000
Temperature coefficient	Gain: ±0.01% of F.S./°C Zero: ±0.02% of F.S./°C
Input resistance	1 MΩ ±5%
Input signal source resistance	1 kΩ or less
Maximum input voltage	Input terminal(+) /Input terminal (-) interval : 1000 Vp-p Input terminal(-) /Input terminal (-) interval : 300 VACrms Input terminal (-)/GND terminal interval: 300 VACrms
Withstand voltage	Input terminal(+) /Input terminal (-) interval: 2300 VACrms/1 minute Input terminal (-)/GND terminal interval: 2300 VACrms/1 minute
Insulation resistance	Input terminal (-)/GND terminal interval: 50 MΩ or more (at DC500 V)
Common mode rejection ratio	90 dB or more (50/60 Hz signal source 300Ω or less)
S/N (Noise)	48 db or more (+/- at short)
Frequency response	DC Coupling : DC~200 kHz (+1/-3 dB) AC Coupling : 4 Hz~200 kHz (+1/-4.5 dB)
Filter	LPF : OFF, Line (1.5 Hz), 5 Hz, 50 Hz, 500 Hz, 5 kHz, 50 kHz (Attenuation) -3 dB (-5.2 dB to -1.4 dB) /6 dB oct
External dimensions [WxDxH] (approximate)	49.2 × 136 × 160 mm (not including protruding parts)
Weight	740g

* Crest factor = Peak value / Effective value

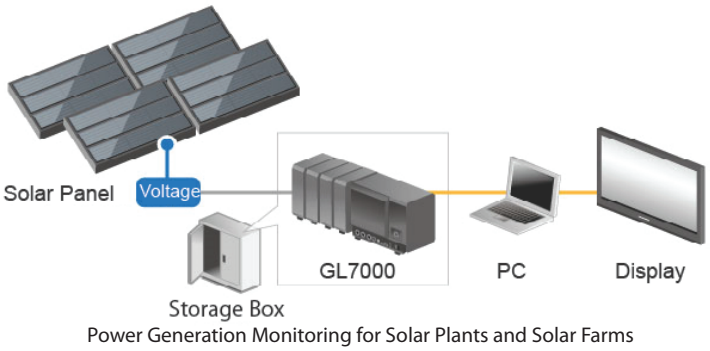
Application Examples



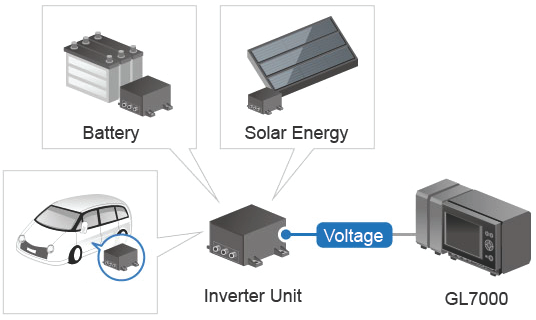
Measurement Analysis for Small Scale Satellite Systems



Production Equipment Performance Measurement and Failure Analysis



Power Generation Monitoring for Solar Plants and Solar Farms



Power Generation Analysis for Inverter and Generator Units