

Highly integrated HV power analyzer for safe testing on HV vehicles

- 2 versions available for high frequency data acquisition up to 1000V and 250A / 1000A
- Measurement data transmission via XCPonETH and OPC UA
- Designed for direct installation in the engine compartment
- Compact and robust devices for extreme requirements



Channel volt	
Input voltage	±1000 V
Cut-off frequency	5 MHz
Input accuracy	DC ±0.03 % of measured value, ±0.02 % of measuring range, ±0.04 V up to 1 kHz ±0.03 % of measured value ±0.02 % measuring range up to 10 kHz ±0.1 % of measuring value, ±0.05% of measuring range up to 100 kHz ±4 % of measured value, ±0.1 % of measuring range up to 1000 kHz, ±5 % of measured value, ±0.5 % of measuring range
Noise	At 15 MS/s -87 dB At 1MS/s -94 dB At 100 KS/s -107 dB At 10 KS/s -117 dB
CMR, Typ. (Min.)	101 dB (88 dB) @ 50 Hz 75 dB (68 dB) @ 400 Hz
Gain Drift	typ. 20 ppm/K (max. 40 ppm/K)
Offset Drift	typ. 1.5 mV/K -1 ppm of range/K
Gain Linearity	< 0.01 %
Input Coupling	DC

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IPETRONIK GmbH & Co. KG • Phone: +49 7221 99 22 - 0 • Web: www.ipetronik.com • E-mail: info@ipetronik.com

Input Impedance	10 MΩ 1 pF
Hardware filter	1 MHz, AAF (6th order)
Channel current	
Current measurement range	±250 A ±1000 A
Maximum withstand peak current	min. -500 A, max. 500 A min. -1700 A, max. 2000 A
Primary / Secondary Ratio	1 : 1680
Input Accuracy (I _p @ 10 Arms)	DC ±0.1 % of reading ±50 ppm of range ±0.05 A Up to 10kHz 25 mdB +/-0.3% Up to 20 kHz 70 mdB +/-0.8% Up to 200kHz 350 mdB 4%
Gain drift (current)	typ. 40ppm/K
Offset drift	typ. 200 uA/K
Linearity error @ 1000 A range	typ. 50 ppm
Hysteresis	typ. 50uA/A
Flatness DC-50Hz Overall accuracy @25°C	typ. 5mdB
Flatness 50-1kHz Overall accuracy @25°C	typ. 20mdB
CMRR	137 dB (450 uA/V)
General channel properties	
AD converter	24 bit hybrid ADC
Device	
Oversampling	15 MS/s
Voltage supply	9 ... 48 VDC
Power consumption, typical	13 W (max. 23 W)
Working temperature range	-20 ... +70 °C (-4 ... +158°F)
Storage temperature range	-40 ... 85 °C (-40 ... 185 °F)
IP-Code	IP 67 (ISO 20653 - 2013)
Dimensions	B245 x H151 x T63 mm (9.65 in x 5.94 in 2.48 in)
Weight	4.4 kg (max. 7 kg) / 9.7 lb (max. 15.43 lb)
Configuration interface	GbE (XCP, OPC UA)
Cable diameter	Nominal DC current 292 A 95 mm ² / 245 A 70 mm ² / 198 A 50 mm ² / 158 A 35 mm ² Rated AC current 206 A 95 mm ² / 173 A 70 mm ² / 140 A 50 mm ² / 111 A / 35 mm ²
High-Voltage Interlock	YES (chassis covers + cables)
Accessories	

System cable	673-100 ETH HV PWR feeder-Cable HV PMD 620-688 LOG GB-ETH cable RJ45 620-686 M-LOG-PR08 ETH cable RJ45 111540 3m Feature ETH cable RJ45 HV-PMD-PWR-001 (Power Junction) HV-PMD-POE-SWITCH-04 (4-Port PoE switch) 673-101 PWR feeder-cable banana HV-PMD
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