

PUMA

Point-of-Utilization Monitoring Adapter



- Point-of-Utilization interconnect for Dranetz-BMI and other manufactures monitors
- Allows users to safely connect a monitor in series with a particular piece of equipment to evaluate its load characteristics, energy usage and efficiency, and any potential power quality related issues.
- Internal CT's and voltage connections - no need to open panels or separate line cord wires to measure voltage and current supplied to the load equipment
- Measures Line-to-Neutral, Neutral-to-Ground, and Line-to-Ground voltages, as well as Line, Neutral and Ground Currents



PUMA is a monitoring adapter compatible with all Dranetz-BMI products to easily, and most importantly, safely measure the voltage and current of any single phase load that has a standard NEMA 5-15 US AC plug. There are many applications for PQ and Demand/Energy monitoring of single phase loads where they 'plug in'. In fact, IEEE Std 1100 (Emerald book) recommends monitoring at the load, or point of utilization to determine the origin of PQ issues. Sample applications are computers, servers, switches, PBX systems, small motors, refrigerators, pumps or any other loads where you wish to determine energy usage, conduct a PQ survey or both simultaneously.

Traditionally there have been many challenges in measuring such loads in a non-invasive and safe manner. The challenge has been how to connect voltage and especially the current probes to an AC outlet or to the load directly. Oftentimes users strip wires or open wall outlets to accomplish such measurements which can be extremely hazardous.

PUMA is an in-line (series) adapter that easily solves these issues in a safe and cost effective manner. Simply plug your single phase load (up to 15A) into PUMA's AC socket and then plug PUMA into the wall outlet. PUMA's has standard banana type voltage connectors and current adapter cables available with TR connectors for direct connection to PX5 family, 61000 or most other Dranetz-BMI products or with BNC connectors for use with other manufacturers meters.



205 Westwood Ave
Long Branch, NJ 07740
1-877-742-TEST (8378)
Fax: (732) 222-7088
salesteam@Tequipment.NET

Voltage Output Connections

- 3 banana-jacks (Line, Neutral, Ground) for use with industry standard safety cables (P/N 900366, 900369, and 900370) and 3 Interconnect cables (P/N 114013-G1)

Current Output Connections

- 9 pin D connector for Line, Neutral, Ground current measurements
- Current Interface Cable for use with Dranetz-BMI products: P/N DB9MTOTR
- Current Interface Cable for use with BNC connector inputs: P/N DB9MTOBNC

Internal CTs

- Current Range: 0 to 15 A steady state
- Accuracy: Amplitude: +/- 1% for current range of 0.5A to 15A
- Phase Accuracy: +/- 0.5 degrees for current range of 0.5A to 15A
- CT Scale Factor: 10 Amps / Volt

Outlet Plug Type

- US NEMA 5-15 plug and receptacle: 15A, 125V

Safety

- Installation Category II, Pollution Degree 2,
Internal 0.1A fuses on measurement voltage outputs, not user replaceable

Environmental

- 0 to 50 deg C, 0-95% RH non condensing, Enclosure rating: NEMA 12, IP 51

Compatible Dranetz-BMI Instruments

- PX5, 4400, PowerVisa, Power Guia, Energy Platform, Mavowatt 30-40-70, PP4300, 61000 with 61MVB/61MAC, EPQ 5520/5593.

Common Packages

- PUMA-US: PUMA only. For Voltage only applications
- PUMA-USTR: PUMA with TR current cable adapter. For Voltage and Current applications
- PUMA-USBNC: PUMA with BNC current cable adapter. For Voltage and Current applications
- PUMA-USTRV: PUMA with TR current cable and Voltage safety cables (Not Shown)
- PUMA-USBNCV: PUMA with BNC current cable and Voltage safety cables (Not Shown)



PUMA-US



PUMA-USBNC



PUMA-USTR