

PMUSB-300 Universal Laptop Optical Probe



Features

- Compatible with virtually all utility meters, registers and recorders that employ ANSI C12.18-1996 and GE OPTOCOM communications protocols
- Designed for use with computers employing USB 1.1 or 2.0 compatible interface ports
- Rugged design with aluminum housing
- Molded cable construction with high-end endurance polyurethane
- Powerful retention magnets for attaching to meter's optical port
- Power to probe controlled by switch in probe's head
- Operates over a wide range of temperature (-30° C TO +65° C)
- Polycarbonate filter to enhance infrared (IR) communications

Overview

The **PMUSB-300 Laptop Optical Probes** are designed for reading and programming electrical power meters employing the ANSI Type 2 optical port. Its optical circuitry supports ANSI C12.18-1996 and General Electric OPTOCOM communications protocols by switching automatically from one to the other depending on the meter type being read. These probes are specifically configured for use with desktop and laptop computers employing USB 1.1 or 2.0 compatible interface ports. They derive power from the USB ports so there is no need for external Battery Packs or AC Adapters. The power to these probes is controlled by the "power switch" mounted in the probe head. When the probe is not in use, the switch turns off and power is conserved, extending the laptop's battery charge. These probes come with Windows Device Drivers that create a Virtual Serial Port to communicate with the meter manufacturer's windows based software.

The PMUSB-300 utility meter reading probe use advanced optical sensors to collect meter data and transmit it to the laptop computer. This allows metering data to be recorded more simply, accurately and efficiently. In addition, the PMUSB-300 probes incorporate a universal compatibility design to read virtually all utility meters, registers and recorders.

****Please follow the procedure "USB Probe Drivers Installation Instructions" to install the optical probe windows driver software prior to using the USB optical probe. ****

Mechanical Specifications

Physical Size	Height 2.44"; Length 1.68"; Width 1.38"
Cable Type	Coiled, Polyurethane & Hytrel construction, Flexible & Rugged
Cable Length	18" Coiled, extends to 10'
Connector	USB standard "A" pplug
Weight	Complete assembly weighs a max. of 9oz.
Finish	Probe head has a clear anodized outer coating per MIL-A-63576A, Type I

Electrical Specifications

Signal Spec	Acts as a device to a host PC USB port
Power Req.	Operating Supply Voltage: +5 VDC (from Computer's USB port). Power to probe controlled by switch in probe's head
Data Rate	Controlled by meter for OPTOCOM interface, USB 1.1 (250K bps), USB 2.0 (12M bps) for non-OPTOCOM meters
Optical	880 nm bi-directional IR interface
Software	Drivers for multiple platforms; Windows 98/2000/XP, Mac OS-9, Mac OS-X, Linus 2-40 and greater

Environmental Specifications

Temperature	Operating -30° to 60° C; Storage -40° to +85° C
Ruggedness	Meets the requirements of a number of tests including those for Thermal Shock, Humidity, Water Resistance, RF Susceptibility, ESD, Drop, Random Vibration, Solar Radiation, Salt, Fog & Low Pressure

Compatible Meters

ABB	2550, 2650, All Alpha, Alpha T, A3, Alt, Alr-al, 2430
Aptech/Robinton	LPR1, LPR2, LPR3, SR500, TR403, TR804
General Electric	DR87, KM901, M90-AE, Phase 3, T80, T91, TM80, TM81, TMR82, TM92, KC901, KTC-901, KV, KV2, KV2-C
Siemens (Landis&Gyr)	CTR101, CTR102, DC, DCR, DD, DG100, DT, DX, DXR, SD100, SM101, SM301, TMC101, LINC, DCRMA, DDMA, S4 family, AX series, RX series, MAXSYS 2410, MAXSYS 2510, Quad 4
Metricom	C
PSI	S100, S200, Quad 4
Pwr Measurement	ION 7000 series, 8000 series
Itron (Schlumberger)	Datastar, Fulcrum, MT100, MT200, Quantum, Q1000, Sentinel, Centron, Vectron
Synergistics	B40
Transdata	EMA, Mark V

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