iP500-330

"USB" Universal Optical Probe

features:

- Designed for Desktop and Laptop computers
- Compatible with virtually all utility meters, registers and recorders
- Supports ANSI C12.18-1996, GE OPTOCOM
- USB 1.1 and USB 2.0 communication
- Powered by computer's USB port
- Designed with rugged Aluminum housing (head)
- Power switch in head to control power
- Rugged and long lasting Polyurethane coiled cord (18" long Ext. to 10')
- Lightweight for reduced fatigue, wear and tear
- Powerful magnets in probe head for attaching to meter's optical port

Overview

The iP500-330 USB Laptop Optical Probes are designed for reading and programming electrical power meters employing the **ANSI Type 2** optical port. These probes are specifically configured for use with Desktop and Laptop computers employing USB 1.1 or 2.0 compatible interface ports. 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. 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 probe 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 iP500-330 Optical Probes use advanced optical sensors to collect meter data and transmit it to the Laptop computers. This allows metering data to be recorded more simply, accurately and efficiently. In addition, the iP500-330 probes incorporate a universal compatibility design to read virtually all utility meters, registers and recorders.

The iP500-330 Optical Probes solve problems relating to mechanical wear-out due to the demanding environment under which probes are constantly subjected to. We address this problem using the most rugged mechanical and electrical design in the industry. These probes are designed with an almost indestructible aluminum head that contains powerful magnets that ensure a good retention when attached to the meter's optical port. They are also designed with a high-endurance polyurethane molded cable 18" long that withstands the outside rugged environment. This claim is backed with an aggressive warranty and service policy.







Mechanical Specifications

Physical size Height 2.44"; Length 1.68"; Width 1.38"

Cable Type Coiled, Polyurethane and Hytrel construction, Flexible and Rugged

Cable Length 18" Coiled, extends to 10 Feet
Connector USB standard "A" plug

Weight Complete assembly weighs a maximum of 9 ounces

Finish Probe head has either a Clear Anodized Outer Coating per MIL-A-68625, Type 2

or a Hard Black Anodized Outer Coating per MIL-A-8625, Type 3

Reliability Two-year (2) warranty for parts and labor

Electrical Specifications

Optical

Signal Spec. Acts as a device to a host PC USB port
Compatibility ANSI C12.18-1996, GE OPTOCOM
Power Req. +5V DC powered by USB port

Data Rate Controlled by meter for OPTOCOM interface, USB 1.1 (250K bps), USB

2.0 (12M bps) for Non-OPTOCOM meters 880 nm bi-directional IR interface

Software Drivers for multiple platforms; Windows 98/2000/XP, Mac OS-9, Mac OS-X,

Linux 2-40 and greater

Environmental Specifications

Temperature Operating -30° to 60° C; Storage -40° to +85° C

Ruggedness Meets the requirements of a numbers of tests including those for Thermal

Shock, Humidity, Water Resistance, RF Susceptibility, ESD, Drop, Random Vibration, Solar Radiation, Salt, Fog and Low Pressure.

Handheld Interface USB 1,1 or 2,0 Port

Some Compatible Meters

ABB 2550, 2650, All Alpha, Alpha T, A3, Alt, Alr-al, 2430, others

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, others

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, others

Metricom

PSI \$100, \$200, Quad 4

Pwr Measurement ION 7000 series, 8000 series

Itron (Schlumberger) Datastar, Fulcrum, MT100, MT200, Quantum, Q1000, Sentinel, Centron, Vectron

Synergistics B4

B40

Transdata EMA, Mark V

***NOTE: Please follow the procedure "<u>USB Probe Drivers Installation Instructions</u>" to install the optical probe windows driver software prior to using the USB optical probe.

