iP500-106

(FW60) Universal 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 RADIX FW60 Handhelds
- Rugged design with Aluminum housing
- Molded cable construction with high-endurance Polyurethane
- Powerful retention magnets for attaching to Meter's Optical Port
- Plycarbonate filter to enhance Infrared (IR) Communications
- Power to probe controlled by Meter Reading Software
- Operates over wide temperature range (-40° C To +85° C)

Overview

The iP500-106 Optical Probe is designed for reading and programming electric power meters employing the **ANSI Type 2** optical port. This probe is specifically configured for use with the **RADIX FW60** handheld computers. Its optical circuitry supports **ANSI C12.18** and **General Electric OPTOCOM** communications protocols by switching automatically from one to the other depending on the meter type being read. The probe obtains its power directly from the handheld computer and it is controlled by the meter reading software.

The iP500-106 Optical Probe uses advanced optical sensors to collect meter data and transmit it to the RADIX hand-held computer. This allows metering data to be recorded more simply, accurately and efficiently. In addition, the iP500-106 incorporates a universal compatibility design to read virtually all utility meters, registers and recorders.

The iP500-106 Optical Probe solves 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. This probe is designed with an almost indestructible aluminum head that contains powerful magnets that ensure a good retention when attached to the meter's optical port. It is 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"

Connector Fischer, 6-pin or 12-pin, male, gold-plated contacts
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

Electrical Specifications

Signal Spec. TTL, Handheld Serial port

Power Req. Operating Supply Voltage: 4.5 to 6.0 VDC (from computer's host port)

Data Rate Controlled by meter for OPTOCOM interface, 0 to 19,200 baud for Non-OPTOCOM meters

Optical 880 nm bi-directional IR interface, ANSI C12.18-1996, GE OPTOCOM

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 Radix FW60

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 C

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

Transdata EMA, Mark V

