

iP300-300

IEC Laptop RS232 Optical Probe

Features:

- Designed for Desktop and Laptop computers
- Compatible with virtually all utility meters, registers and recorders that support European Standard **IEC 62056-21 (IEC 1107)** Communications Protocol
- Serial RS232 & EIA232D communication
- Powered by computer's PS/2 mouse port, battery pack, AC adapter or optional 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 **iP300-300** Laptop Optical Probes are designed for reading and programming electrical power meters employing the **IEC 62056-21 (IEC 1107) FLAG** optical port. Its optical circuitry supports IEC 61107 communications protocol only. These probes are specifically configured for use with desktop and laptop computers employing the Serial Communication Ports with DB9 connectors and derive power from their PS/2 mouse or keyboard ports. The power to these probes is controlled by the **"power switch"** mounted in the probe head. It automatically activates when the probe is attached to a meter and, when probe not in use, the switch turns off and power is conserved, extending the laptop's battery charge.

The **iP300-300** 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 **iP300-300** probes incorporate a universal compatibility design to read all IEC FLAG utility meters, registers and recorders.

The **iP300-300** 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.



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Technical Specifications

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	DB9 9-pin female connector w/housing 6-pin mini-DIN (PS/2 mouse/keyboard)
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.	Serial RS232, EIA232D, V28, V32
Power Req.	Operating Supply Voltage: 4.5 to 6.0 VDC (from computer's PS/2 port)
Data Rate	0 to 19,200 baud
Optical	880 nm bi-directional IR interface, IEC 1107

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.

Some Compatible Meters

ABB	2550, 2650, All Alpha, Alpha T, A3, Alt, Alr-al, 2430
Aptech/Robinton	LPR1, LPR2, LPR3, SR500, TR403, TR804
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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