

## iP501-124

Dual ANSI / IEC Itron G5/FC200/FC300
Universal Optical Probe



- 2 probes in 1: ANSI and IEC compatible design
- New Smaller Housing design made of Polycarbonate with Glass Fiber Reinforcement
- Compatible with either ANSI C12.18 or IEC 62056-21 (1107) meters as well as GE OPTOCOM
- Designed for use with Itron G5, FC200/FC300 Handheld computers
- Compatible with virtually all utility meters, registers and recorders
- Power to Probe controlled by HH meter reading software
- Rugged and long lasting Gray Polyurethane coiled cord (18" long Ext. to 10')
- Even lighter weight for reduced fatigue, wear and tear
- Polycarbonate filter to enhance infrared (IR) communications
- Powerful magnets in probe head for attaching to meter's optical port



The NEW **iP501-124** Universal Optical Probes are designed for reading and programming **ANSI** and **IEC** electrical power meters. **NOW, THERE IS NO NEED TO CARRY 2 OPTICAL PROBES FOR READING OR PROGRAMMING METERS THAT EMPLOY EITHER TYPE OF OPTICAL PORTS**. In addition, these new probes incorporate a new smaller housing design that makes them even more light-weight but still rugged with their Polycarbonate Glass Fiber Reinforcement material.

These probes are configured for use with **Itron's G5, FC200/FC300** handheld computers. Their optical circuitry supports **ANSI C12.18-1996, IEC 62056-21 (1107)** as well as **General Electric OPTOCOM** communications protocols by switching automatically from one to the other depending on the meter type being read. This design feature make them universally compatible to read virtually all utility meters, registers, and recorders. They obtain their power directly from the handheld computer and it is controlled by the meter reading software.

For reading and programming ANSI meters, the optical probe is attached to the meter's optical port in the standard position (cable facing downwards) and for IEC meters the probe is attached to the meter's optical port inverted (cable facing upwards) (See Page 2 for Meter Attachment Illustration)

The NEW **iP501-124** 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 Polycarbonate 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.

\*\* We recommend special care when attaching the probe connector to the handheld communications port (receptacle) to avoid bending or damaging the connector contacts. Please refer to the "Hirose Plug Connections Procedure" to view proper probe connection to handheld \*\*

# TECHNICAL SPECIFICATIONS

#### **Mechanical Specifications**

Physical size Length 2.14", Width 1.38", Height 1.14"

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

Cable Length 18" Coiled, extends to 10'

Connector Hirose, 12-pin, Male, Push-pull mechanism, Gold plated contacts Weight Complete assembly weighs a maximum of 5.6 ounces (0.35 lbs)

Finish Probe Head Light Gray Polycarbonate
Reliability Two-year (2) warranty for parts and labor

#### **Electrical Specifications**

Signal Spec. RS232 port

Compatibility ANSI C12.18-1996, IEC 62056-21 (1107) and GE OPTOCOM

Power Req. Operating supply voltage: +5V DC (from computer's RS232 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

#### **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.

PC Interface Itron G5, G5R, FC200, FC300

#### 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

IUSA Various

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 S100, S200, Quad 4

Pwr Measurement ION 7000 series, 8000 series

Quad Logic RSM-5

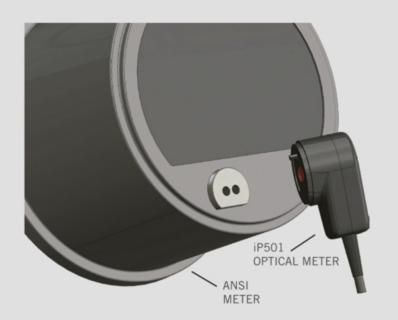
Itron (Schlumberger) Datastar, Fulcrum, MT100, MT200, Quantum, Q1000, Sentinel, Centron, Vectron

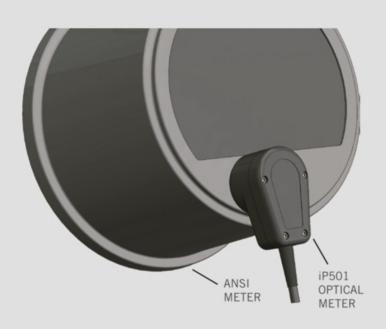
Synergistics B40

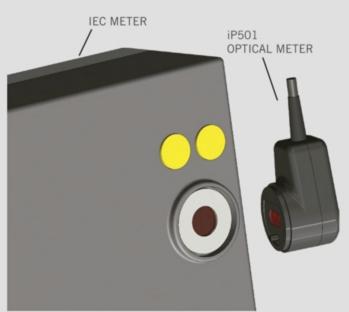
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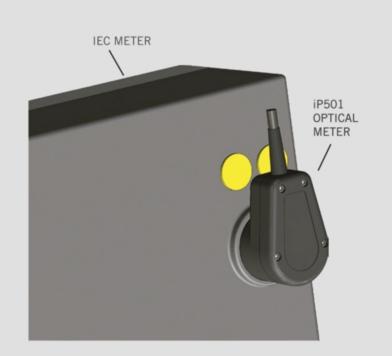
Others Not listed – to be added

## METER ATTACHMENT ILLUSTRATION













## **ABOUT US**

- We were founded in 2010 with one purpose in mind: to provide high-quality products, services, and support to customers in the utility meter reading industry.
- We manufacture optical probes for reading and programming ANSI and IEC electric meters.
- We carry the most durable, mechanical and electrical design in the industry.
- Our probes can be configured to interface with virtually any handheld computer or PDA available in today's market.

## DURABLE & RUGGED OPTICAL PROBES

Our iP500 Series probes feature a highly-resistant aluminum head and now our iP501 Series probes feature a light-weight Polycarbonate head, both designed with powerful magnets to ensure great retention when attached to the meter's optical ports.



#### PROBES FOR HANDHELDS

Our universal optical probes can be configured to interface with handhelds such as DAP Technologies, Itron, Intermec, Radix, and others.

#### PROBES FOR PCS

Our probes are designed to interface with desktop or laptop PC computers through serial RS232 or USB communication ports.

#### **CUSTOMIZED** SOLUTIONS

We specialize in the production, repair & maintenance of the most popular probes in the market!

We design, manufacture and market a range of optical probes designed to program and read electric and gas meters that incorporate the ANSI Type 2 as well as IEC Flag optical ports.

### YOUR METER READING SOLUTION

No matter what computer you are using out in the field for your meter data collection, you can be sure that we can provide an optical probe for that application.

#### REPAIRS & MAINTENANCE

