

# iP503-333 "ANSI"

"USB Type C" Optical Probe



### **FEATURES**

- New ANSI compatible design
- New Bi-Color LED Indicator for TX / RX communication signals
- New Smaller Housing design made of Polycarbonate w/Glass Reinforcement
- Compatible with ANSI C12.18-1996 or 2006 standards
- Designed for Windows or Android based devices such as Tablets and other compatible devices
- Overmolded USB C Male Connector
- · Compatible with virtually all utility meters, registers and recorders
- Powered by computer's or Tablet's USB C port
- Straight cable, 3.5 feet long (1 Meter), Polyurethane Flame-retardant
- Even lighter weight for reduced fatigue, wear and tear
- Polycarbonate RED/BLUE filter to enhance infrared (IR) communications
- Powerful retention magnets in probe head to ensure strong adhesion to meter's optical port

## **OVERVIEW**

The NEW iP503-333 ANSI USB Optical Probes are designed for reading and programming ANSI electrical power meters. These optical probes are designed with an overmolded 'USB Type C Male Connector' to connect to Android or Windows based devices such as Tablets and any other compatible devices. In addition, they incorporate a new, smaller housing design that make them even lighter weight but still rugged with its Polycarbonate Glass Fiber Reinforcement material.

Their optical circuitry supports ANSI C12.18-1996 or 2006 communications protocols. They are compatible with virtually all ANSI utility meters, registers and recorders. They derive power from the USB C ports so there is no need for any additional Adapters or Converters for its function.

These probes work with Windows or Android Devices by installing appropriate Drivers that create a Virtual Serial Port to allow communication between the meter and the manufacturer's Windows based or Android software.

The NEW iP503-333 ANSI Optical Probes solve problems related 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 designed with a Straight Polyurethane, Flame-retardant, Black cable 3.5 Feet or 6 Feet long (1 meter o 2 meters depending on customer's specifications) that withstands the outside rugged environment. This claim is backed with an aggressive warranty and service policy.

# TECHNICAL SPECIFICATIONS

iP503-333 "ANSI"

#### **Mechanical Specifications**

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

Cable Type Straight, Black, Polyurethane, Flame-Retardant Jacket

Cable Length 3.5 Feet (1 Meters) or 6 feet (2 meters)

Connector USB C Male Connector

Weight Complete assembly weighs a maximum of 2.5 ounces (0.15 lbs)

Finish Probe Head Light Gray Polycarbonate
Reliability One-year (1) warranty for parts and labor

#### **Electrical Specifications**

Signal Spec. Acts as a device to a host PC USB port

LED Indicator

Compatibility

ANSI C12.18-1996 or 2006

Power Req.

Data Rate

Optical

TX (Red), RX (Green)

ANSI C12.18-1996 or 2006

+5V DC powered by USB-C port

Controlled by meter or 0 - 57,600 baud

890 nm bi-directional IR interface

Software Drivers for multiple platforms; Windows 98/2000/XP/VISTA/Win7/Win10/Win

Mobile/Mac OS-9, Mac OS-X, Linux 2-40 and greater, Android

### **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 Windows or Android USB-C

#### Some Compatible Meters

ABB (Elster) 2550, 2650, All Alpha, Alpha T, A3, A1t, A1R, A1R+, 2430, others

Aptech/Robinton LPR1, LPR2, LPR3, SR500, TR403, TR804

General Electric 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

 Nexus
 1262 / 1272 Series, others

 PSI
 S100, S200, Quad 4

 Pwr Measurement
 ION 7000 series, 8000 series

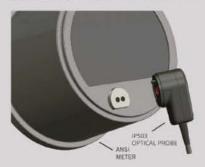
Itron (Schlumberger) Datastar®, Fulcrum®, Quantum®, Sentinel®, Centron®, Vectron®, OpenWay®

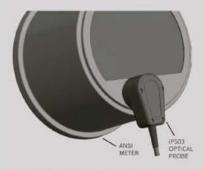
Synergistics B40
Transdata EMA, Mark V

Others More to be added



#### METER ATTACHMENT ILLUSTRATION





\*\*\*NOTE: Please follow the procedure "IP501/IP503 USB Probe Drivers installation instructions" to install the optical probe windows driver software in PC prior to using the optical probes.



Tel: 956-630-1833

Fax: 956-630-2241

