XINGHANG

Smart Metering



USB Near-Infrared Optical Probe

XINGHANG

WWW.XINGHANGMETER.COM

NBXH001

Application



NBXH001 is a USB-to-near-infrared converter complying with IEC 62056-21 & IEC 1107. Developed for infrared reading, debugging and factory testing of smart water meters & heat meters.
Magnetic suction for easy alignment on meter optical window. CH340 chip, USB2.0, plug-and-play without extra power. Red/green LED flashes for communication.
Supports 300~19200bps adaptive half-duplex transmission, transparent for DLMS/COSEM and MODBUS.
Small size, Windows compatible, ideal lightweight tool for meter R&D and field service.

Main Technical Specifications

Parameter Item	Specification
Model	NBXH001
Power Supply	CH340 chip, USB2.0, no external power required
IR Probe Dimension	Φ32.2 mm × H28.5 mm
IR Wavelength	940 nm
Magnetic Force	＞15 N
Communication Indicator	Dual-color (Red/Green) LED, flashes during communication
Baud Rate	300 / 600 / 1200 / 2400 / 4800 / 9600 / 19200 bps, adaptive, half-duplex
Max. Communication Distance	30 mm (varies by meter model)
Reference Standards	IEC 62056-21, IEC 1107, DLMS/COSEM
Data Mode	Transparent transmission, supports full protocols such as DLMS/COSEM, MODBUS
Mounting Method	Magnetic adsorption on meter infrared window
Standard Cable Length	1.4 m; custom length available
Compatible OS	Windows XP / Win7 / Win8 / Win10 / Win11



Two Infrared Optical Windows
One transmitter, one receiver
| 940 nm near infrared



Dual-color (Red/Green) Comm LED
Flashes during IR communication



USB 2.0 Interface
Plug & Play, No External Power Required