



Operating Specifications

Optical Input	Compliant with IEC62056-21, mode C and E
Data Output Interface	Bluetooth
Data Rate	default: 300 - Adjustable to 600,1200,2400,4800,9600,19200 Auto secondary baud rate detection
Frame	Default 7E1, Adjustable to 8N1
Enhanced Data Rate (EDM)	Compliant with V2.0.E.2 3 Mbps modulation mode
Radio Type	Bluetooth module operating frequency band: 2.40 - 2.48 GHz
Maximum Bluetooth Effective Range	10 m

Datasheet

OP-700

Bluetooth Optical Probe

Bluetooth optical probe (OP-700) is a 2-way optical interface compliant with IEC62056-21 international standard for data transmission with all types of IEC meters. Data transmission between meter and the probe is done via infra-red and data transmission between the probe and the reader device is via bluetooth.

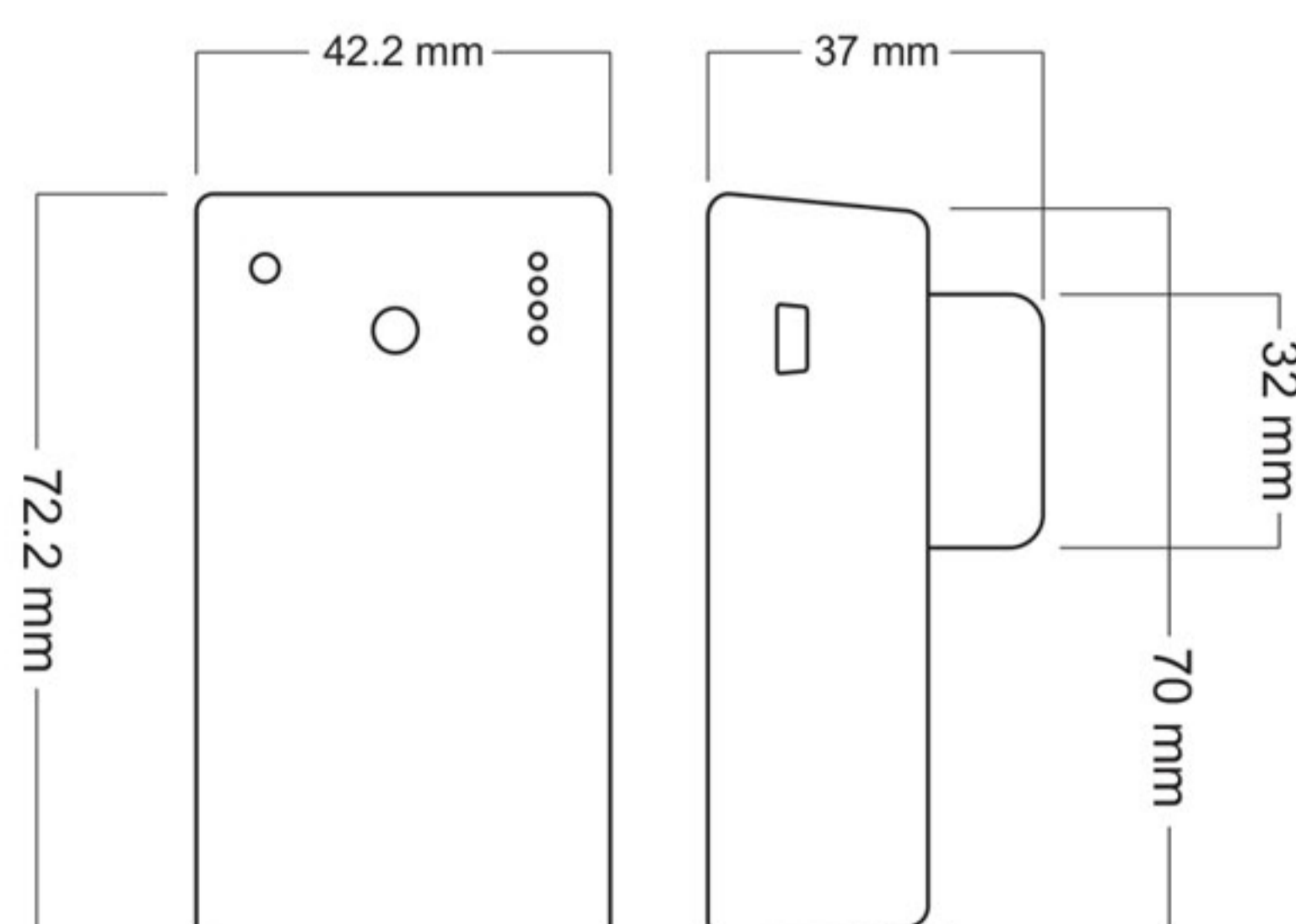
Features and Benefits

- Resistant against environmental lights
- Bluetooth interface for interconnection with reader device
- Powerful magnetic force to keep the probe on the meter
- Internal rechargeable battery

Mechanical Specifications

Dimension	72.2x42.2x37 mm
Weight	75 gr
Material	ABS
Port	IEC62056-21
Lens	IR transmitter acrylic
Magnetic Force	more than 15 N
ECO filter	Yes

Mechanical Dimensions



Compatibility

Bluetooth	Compatible with any Bluetooth Ver. 2.0+EDR device.
Operating System	Windows 98, 2000, XP, Vista, 7, 8, 10
Meter Types	All meters with IEC62056-21 compatible ports

Electrical Characteristics

Battery	Li-ion, 3.7V, 650mAh
	14 hours sending state
	17 hours idle

@25 degree	min	Typical	Max	Unit
Supply Voltage	4.5	5	5.5	V
Supply Current	-	200	-	mA

Optical Characteristics

	min	Typical	Max	Unit
Peak Emission Wavelength	-	880	-	nm

Optical Filter Characteristics

Physical	Test Method	Unit	Value
Density	ASTM D-792	g/cm ³	1.19
Pencil Hardness	ASTM D-33	H	~2-3
Water Absorption	ASTM D-570	%	0.3

Optical	Test Method	Unit	Value
Transmittance	ASTM D-1003	%	~92
Reflective Index	ASTM D-542	%	1.49

Optical Filter Characteristics

Chemical Resistance

"+" = no change, "x" = conditionally resistant, "-" = not resistant

- Acetone	- Alcohol (96%)	+ Dilute Alcohol (50%)	- Amine
- Aniline	x Ether	- Aromatic Hydrocarbon	+ Ethylene Glycol
+ Benzine	- Benzene	x Bromine Vapors	x Chlorine Vapors
- Chlorinated Hydrocarbon	- Ester	x Florine Vapors	x Formaldehyde (10-40%)
+ Glycerine	+ Factory Fume	+ Hexane	- Ketones
- Paint thinner	+ Lanolin	+ Bases (10%)	x Bases (20%)
+ Methylamine	+ Mineral Oil	+ Chlorinated Paraffin	+ Petroleum Ether
- Phenole	+ Salt Solutions	+ Acids (20%)	- Carbon Tetrachloride
- Fuel mixture	+ Water	+ Xylene	

Magnet Safety Warnings

This device contains a strong Neodymium magnet. German Metering will NOT be responsible for personal injury or property damage resulting from the use or misuse of our products! Please use caution and common sense, and please read and understand our safety warnings below!



Damage to magnetic storage media

Magnetic fields can cause damage to magnetic storage media. These include: cassette tapes, floppy disks, credit cards, video tapes, and computer hard drives. Keep this device at least 24 inches away from all types of magnetic media.

Damage to Electronics

Certain electronic devices are sensitive to magnetic fields and may be damaged permanently or temporarily disabled if exposed to a magnetic field that is too strong. Any video screen or television will become distorted and/or discolored if exposed to a strong magnetic field. While damaged screens can usually be demagnetized, it's often tricky and may require qualified service technicians to do so. Other electronic devices like cellphones and pagers can also be damaged. Store this device in a safe place away from electronics of any kind.

Disclaimer

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