



# LR-TB2000

Detection distance 2 m, Cable, Laser Class 2



\*Please note that accessories depicted in the image are for illustrative purposes only and may not be included with the product.

## Specifications

Model		LR-TB2000
Type		Cable
Detectable distance		60 to 2000 mm 2.36" to 78.74" <sup>*1</sup>
Spot diameter		Approx. ø4 mm ø0.16"
Light source	Type	Red laser (660 nm)
	Laser class	Class 2 laser product (IEC60825-1,FDA (CDRH) Part1040.10 <sup>*2</sup> )
Mutual interference prevention function		4 units (when using the interference prevention function)
Timer		OFF/OFF delay/ON delay/One-shot
Response time		1 ms/10 ms/25 ms/100 ms/1000 ms selectable
I/O	Control output	NPN open collector/PNP open collector selectable 30 VDC or less, 50 mA or less, residual voltage: 2 V or less, N.O./N.C. selectable <sup>*3</sup> 4
	Analog output	-
Protection circuit		Protection against reverse power connection, power supply surges, output overcurrent, reverse output connection, and output surge
Power voltage		20 to 30 VDC, including 10% ripple (P-P), Class 2 or LPS
Current consumption		45 mA or less (without load) <sup>*5</sup>
Environmental resistance	Enclosure rating	IP65/IP67 (IEC60529)
	Ambient light	Incandescent lamp/Sunlight: 10,000 lux or less
	Ambient temperature	-20 to +55 °C -4 to 131 °F (No freezing)
	Relative humidity	35 to 85 % RH (No condensation)
	Vibration resistance	10 to 55 Hz, Double amplitude 1.5 mm 0.06", 2 hours in each of the X, Y, and Z directions
	Shock resistance	1,000 m/s <sup>2</sup> , 6 times in each of the X, Y, and Z directions
Material		Case: Zinc die cast (Nickel chrome plating), Indicator cover and buttons: PES, Lens cover and display: PMMA (scratch-resistant coating specifications), Cable bushing: PBT, Cable: PVC
Accompanying items		Instruction manual, Laser warning and explanation labels
Weight		Approx. 125 g (Including cable)

<sup>\*1</sup> The range for displayable distance is from 50 to 2200.  
<sup>\*2</sup> The laser classification for FDA (CDRH) is implemented based on IEC60825-1 in accordance with the requirements of Laser Notice.  
<sup>\*3</sup> You can select the I/O from the following combinations.  
Control output × 2, control output + external input  
Control output + analog output (LR-TB5000/TB5000C/TB5000CL only)

External input + analog output (LR-TB5000/TB5000C/TB5000CL only)

(For details on the setting method, see the instruction manual.)

\*4 IO-Link specification v.1.1/COM2 (38.4 kbps) is supported. You can download a setup file from the KEYENCE website (<http://www.keyence.com>).

If you are using the product in an environment in which you cannot download files over the Internet, contact your nearest KEYENCE office.

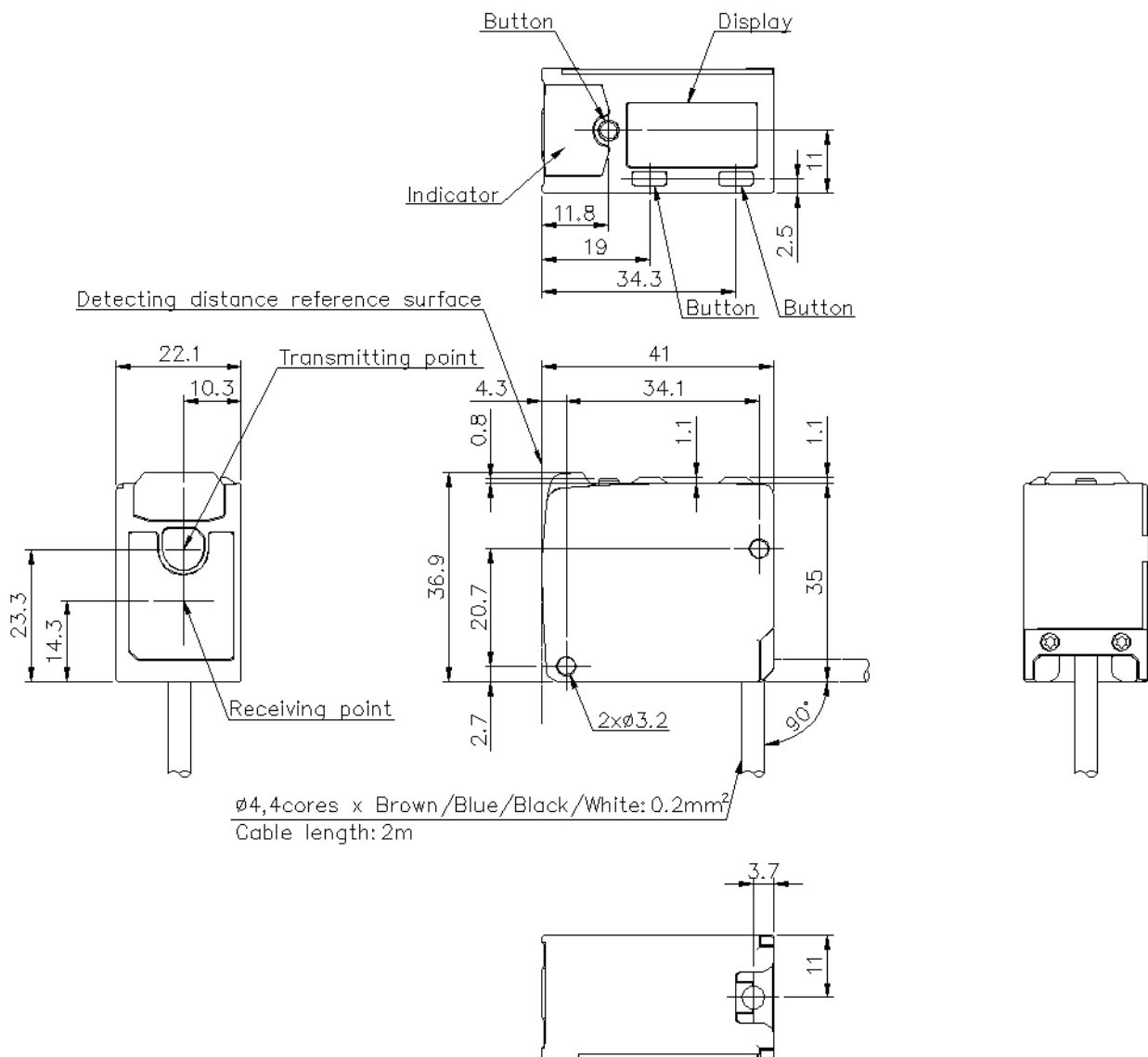
\*5 145 mA or less (with load)

## Dimensions

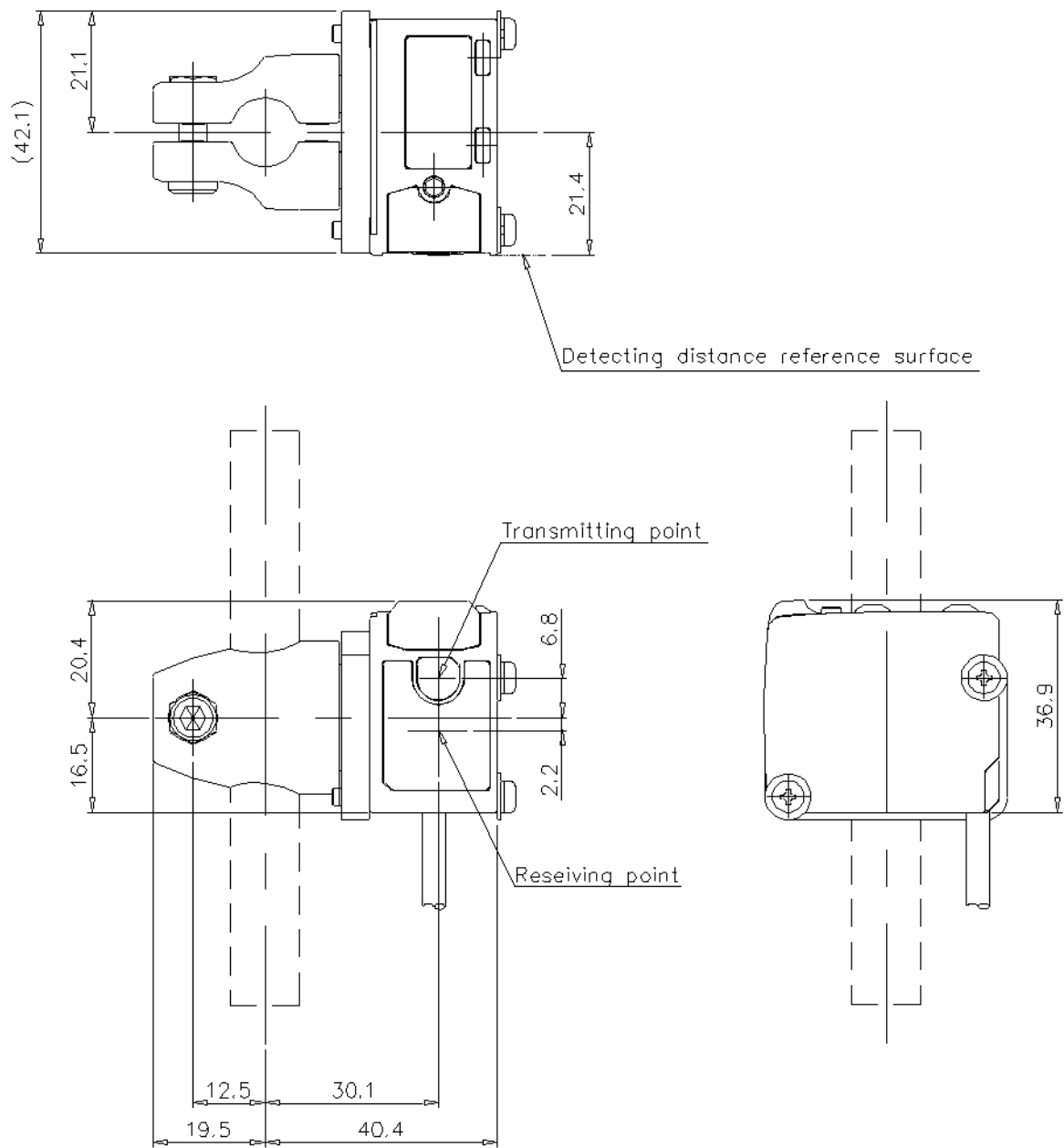
\* Download CAD file or product manual for larger image/text and more detail.

lr-tb2000\_2\_dimension\_01.gif

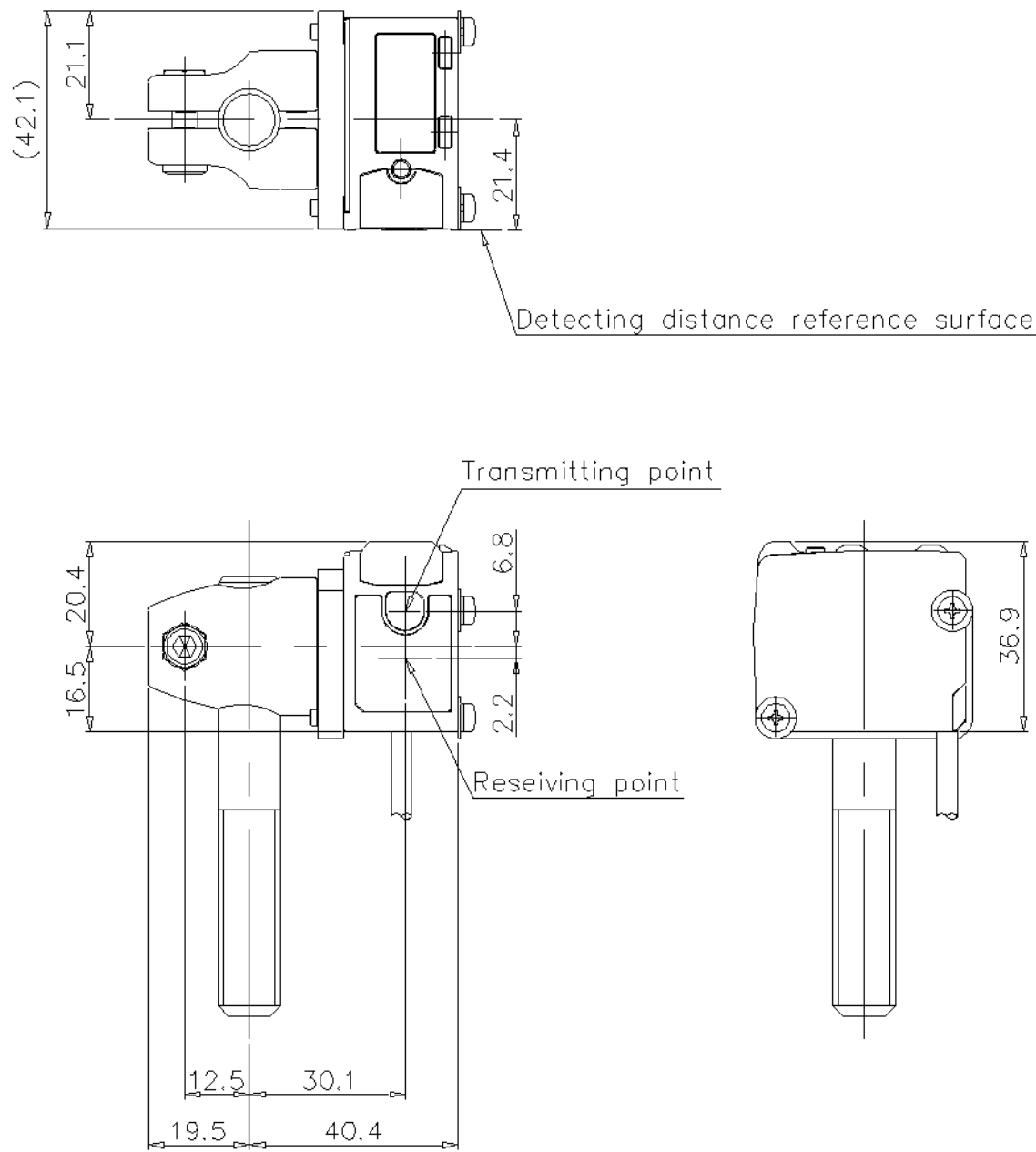
LR-TB2000



OP-87772/LR-TB2000



□P-87772/□P-87775/LR-TB2000



OP-87776/LR-TB2000

