

# Data sheet

Spot diameter	Near(160mm): $\approx 990 \times 1,000 \mu\text{m}$ Reference(300mm): $\approx 490 \times 510 \mu\text{m}$ Far(450mm): $\approx 365 \times 355 \mu\text{m}$
Resolution	20 $\mu\text{m}$
Reference distance	300mm
Max. measurement range	160 ~ 450 mm
Linearity	$\pm 0.25\%$ of F.S.
Temperature Characteristics	0.08% of F.S./ $^{\circ}\text{C}$
Power supply	Using power from the amplifier unit.
Light source	Red semiconductor laser (wavelength: 660nm, IEC 60825-1:2014)
Light Source_Optical method	Diffuse reflection
Light Source_Laser class	Class 2 (IEC/EN), Class II (FDA (CDRH) CFR Part 1002)
Light Source_Output	$\leq 1 \text{ mW}$
Laser Pulse duration	Max. 2ms
Operation indicator	Power indicator: red LED, Laser emission indicator: green LED, NEAR/FAR indicator: green LED
Insulation resistance	Over 20M $\Omega$ (at 500VDC megger)
Noise immunity	Square shaped noise by noise simulator (pulse width: 1 $\mu\text{s}$ ) $\pm 500\text{V}$
Dielectric strength	Between the charging part and the case: 1,000 VAC~ 50/60 Hz for 1 minute
Vibration	1.5 mm amplitude at frequency of 10 to 55Hz in each X, Y, Z direction for 2 hours
Shock	300m/s <sup>2</sup> (approx. 30G) in each X, Y, Z direction for 3 times
Environment_Ambient illumination	Max. Incandescent lamp 10,000 lx
Environment_Ambient temperature	-10 to 50 $^{\circ}\text{C}$ , storage: -15 to 60 $^{\circ}\text{C}$
Environment_Ambient humidity	35 to 85 %RH, storage: 35 to 85 %RH (no freezing or condensation)
Protection structure	IP67 (IEC Standards, except connector of extension cable)
Material	Front case: AL, Rear case: PC, Cable: PVC, Sensing part: Glass
Amplifier unit compatibility	BD Series amplifier unit: 1
Weight	$\approx 151 \text{ g}$ ( $\approx 330 \text{ g}$ )