AT-400 Technical Datasheet

Shaft Alignment System | Geometric Measurement System

M9 & S9 Sensors

Hardware Type	M9 1-1216, S9 1-1217

Physical

Housing Material	Anodized Aluminum frame and high impact ABS plastic.
Weight	M9: 10.8 oz (306 g) S9: 10.8 oz (306 g)
Dimensions	TD9: 3.9 in x 3.0 in x 1.7 in (100mm x 77.3mm x 43mm)

Environment

Operating Temperature	14 to 122 °F (-10 to 50 °C)
Storage Temperature	-4 to 158 °F (-20 to 70 °C)
Long Term Storage Room Temperature	64 to 82 °F (18 to 28 °C)
Battery Charging Temperature	32 to 104 °F (0 to 40 °C)
Relative Humidity	10 – 90 %
Environmental Protection	IP65 (Dust tight and protected against water jets)

Sensing Technology

Laser	650 nm class II diode laser
Laser Power	< 1 mW
Measurement Distance	2.48 in to 65.6 ft (63mm to 20m)
Detector	2-axis PSD
Detector Size	0.79 in x 0.79 in (20mm x 20mm)
Detector Resolution	1 µm
Measurement Accuracy	1% ± 3 µm
Signal Processing	Digital signal processing with sidespot rejection, edge detection, ambient light elimination and anti-vibration mode.

Ambient Light Protection	Optical Filtering and Ambient Light Signal Rejection.
Inclinometer	Dual High Performance MEMS inclinometers
Inclinometer Resolution	0.01°
Inclinometer Accuracy	±0.1°
Gyroscope	6-Axis MEMS Inertial Motion Sensor with Drift Compensation and Automatic Field Calibration
Gyroscope Accuracy	±1°

Battery

Type	High Performance Li-ion Rechargeable Battery or External Power
Operating Time	8 Hours Continuous Use (Measuring)
Charging	8 Hours
LED Indicators	Unit State, Laser Transmission and 5 Battery Status Indicators with Instant Battery Check

Communication

Wireless Communication	Bluetooth Low Energy (Bluetooth 5)
Communication Range	33 ft (10m)
Connectors	1 USB Mini Port (IP67)

Acoem Alignment Display Unit

Display	· Sunlight Readable · Capacitive Multi-Touch Display · Super-Hardened Gorilla Glass · Rain and Glove Mode
Display Size	8 in
Ruggedness Rating	· IP67 (Including Ports) · Waterproof and Dust-Tight
Operating Temperature	-4°F to 140°F (-20°C to 60°C)

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