

Highly accurate, wireless scan target with integrated, swiveling on-board readout for single or dual-axis alignment

The A-1519-2.4XBE-RO / A-1520-2.4XBE-RO Integrated Wireless Targets with Readout Display

Target features include:

- ✦ The A-1519-2.4XBE-RO and A-1520-2.4XBE-RO are high-resolution, high-accuracy wireless targets with a rotating readout mounted directly on the target body. The on-board readout swivels for easy viewing from any angle, eliminating the need for a separate display unit. The targets operate in either single or dual-axis modes for use with most of Hamar's scanning or straight-beam lasers.
- ✦ In single-axis scanning mode, the targets are used with Hamar Laser's continuously sweeping lasers (L-730/L-740 series) for measuring the flatness, straightness, squareness and parallelism of both machine tool linear and rotary axes, platens and rolls.
- ✦ In dual-axis mode, the targets are used with our straight-beam lasers, such as the L-702SP/L-703S/L-705/706/708 for gas steam turbine applications.
- ✦ The A-1519-2.4XBE-RO Target provides a measuring range of $\pm .55$ in. (± 14 mm) and the A-1520-2.4XBE-RO has a range of $\pm .10$ in. (± 2.5 mm). Both targets feature an electronic "zero" function and an operating range of 100 ft. (30.5 m) from laser to target with a resolution up to $.00001$ in. (0.0025 mm).
- ✦ Super-linear, fully linearized position-sensitive detectors (PSDs) with automatic background-light correction for extremely accurate readings.
- ✦ Easily converts to a height gage as the center of the target has been set to a tightly-controlled dimension. Attach precision spacer to the base of the target and the exact dimension from laser plane to the measured surface can be obtained. Optional precision spacers (1 in., 2 in., 3 in., and 6 in.) accurate to $.0003$ in. (0.0075 mm) are available.
- ✦ Package includes target, magnetic base, and three insert posts (6.25 in., 4 in., and 2 in.) for coarse height adjustment.
- ✦ Automatic on/off operation. The targets activate when the laser beam sweeps across the sensor. Flashing target indicators provide immediate "off target" status.
- ✦ Powered by two internal lithium-ion batteries. Comes with AC adapter/charger, low battery and charging indicators. Optional A-1519CS-4 Charging Station charges up to 4 targets simultaneously.
- ✦ Data transmitted wirelessly using XBee® radios with range of up to 133 ft. (40 m).



The A-1519-2.4XBE-RO/A-1520-2.4XBE-RO Wireless Targets

Integrated Readout features:

- ✦ Single-axis readout features a swiveling mount for optimal viewing angle.
- ✦ User-selectable display in inches or millimeters.
- ✦ Readings in either Relative (Zero) or Absolute mode.
- ✦ Bright numeric LED display with 4-decimal-place resolution ($.0000$ in. or 0.000 mm) for easy viewing of target readings.
- ✦ Powered directly by the target.
- ✦ Small, lightweight aluminum housing.



Hamar Laser Instruments, Inc.
5 Ye Olde Road Danbury, CT 06810
Phone: +1.203.730.4600 Fax: 203.730.4611
E-mail: sales@hamarlaser.com www.hamarlaser.com
[Click here](#) for a list of our distributors.



Specifications

A-1519-2.4XBE-RO and A-1520-2.4XBE-RO Wireless Targets

Size:	2.25 W x 6.11 H x 2.15 D in. (57.2 x 155.1 x 54.6 mm)
Weight:	16.1 oz. (0.45 kg)
Target Angle Acceptance:	±10°
Power Supply:	7.5–12 VDC, 500 mA
Battery Life:	8.5 hours continuous duty with display on low brightness
Operating Temperature:	35° F to 140° F (2° C to 60° C)
Detector Size / Type:	2-Axis PSD 1.3 x 0.51 in. (33 x 13 mm)
Operating Range:	100 ft. (30.5 m) from laser to target
Auto On/Off Power:	Target activates when laser beam sweeps across sensor; turns off when laser stops sweeping
Magnetic Base Size:	2.00 W x 2.53 H x 3.55 D in. (50.8 x 64.2 x 105.2 mm) w/o T-screw
Magnetic Base Weight:	2.78 lb. (1.26 kg)

PSD Sensors

Model Number	Sensor Resolution	Linearized Accuracy	Measuring Range
A-1519	.00002 in. (0.0005 mm)	±.00015 in. (±0.0038 mm)	± .55 in. (± 14 mm)
A-1520	.00001 in. (0.00025 mm)	±.00006 in. (±0.0015 mm)	± .1 in. (±2.5 mm)

Radio Specifications

Indoor Range:	133 ft. (40 m)
Transmit Power:	+8 dBm (6.3 mW)
Radio Frequency:	2.4 GHz, DSSS (Direct Sequence Spread Spectrum)
Certification:	FCC ID: MCQ-XBEE3 (Part 15) CE: ETSI (Europe) IC ID: 1846A-XBEE3 (Canada) RCM/R-NZ (Australia/New Zealand) ANATEL 06329-18-01209 (Brazil) TELEC [R] 210-119309 (Japan)

Integrated Rotating Readout

Power Supply:	Supplied by target
Housing Material:	Aluminum and plastic
Physical Dimensions:	2.25 W x 1.53 H x 2.15 D in. (57.2 x 38.9 x 54.6 mm)
Display Resolution:	.1, .01, .001, .0001 in. .1, .01, .001 mm
Functions:	Zero (Relative Mode) Units (in. mm) Display Resolution ABS/REL Mode toggle
Mount:	Swiveling mount on target body for adjustable viewing angle

A-1519-2.4XBE-RO AND A-1520-2.4XBE-RO WIRELESS TARGETS WITH ATTACHED DISPLAY

