

The A-1519 and A-1520 Series Type II Universal Wireless Targets

The most accurate, versatile,
easy-to-use targets available
now operate in both single
and dual-axis modes!

Target Features:

- Hamar Laser's A-1519-2.4ZB and A-1520-2.4ZB Type II Universal Wireless targets operate in both single and dual axis modes (depending on the readout used) and are now available with ZigBee® radio technology.
- In single axis scanning mode, the targets can be used with Hamar Laser's continuously sweeping lasers (L-730/L-740 series) for measuring the flatness, straightness, squareness and parallelism of both machine tools and rolls. Several options are available to display the target data: the R-1355-2.4ZB Rugged PDA display, the R-1307-2.4ZB Readout, the R-1307W-2.4ZB Readout or the R-1308 Readout.
- The targets can also be used in dual-axis mode with our L-705/706/708 Bore lasers for steam turbine applications. The R-1307W-2.4ZB or R-1307-2.4ZB are used to display the data.
- The targets provide up to a 1-inch (25 mm) measuring range, an electronic "zero" function and an operating range of 100 feet (30.5 m) from laser to target. The A-1519 has a resolution of .00002" (0.5 microns). For applications where greater accuracy is needed, such as surface plates, the A-1520 has a resolution of .00001" (0.25 microns).
- The targets feature fully linearized, position-sensitive detectors with automatic background- light correction for extremely accurate readings. The A-1519 targets have an accuracy of +/- 0.00015 " (0.0038 mm) and the A-1520 targets have an accuracy of +/- .00006" (0.0015 mm) over the central 80% of the sensor area.
- Both the A-1519 and A-1520 can easily be converted to a height gage, as the center of the target has been set to a tightly-controlled dimension. Attach the 2.565" spacer to the base of the target and the exact dimension from laser plane to the measured surface can be obtained. Optional precision spacers are available in 1", 2" 3" and 6" sizes, all of which are accurate to .0003" (0.0075 mm).
- The A-1519 and A-1520 packages include the target, a magnetic base, and three insert posts (6.25", 4", and 2" or 158.8 mm, 101.6 mm and 50.8 mm) for coarse height adjustment.
- Completely automatic on/off operation with no switches, wires or connections. The target activates when the laser beam sweeps across the target cell and flashing target indicators provide immediate "off target" status.
- Powered by two internal lithium ion batteries for long life and usage. Comes with AC adapter/charger, low battery and charging indicators. Targets can also be charged with the optional A-1519CS-4 Charging Station that charges up to 4 targets simultaneously.
- Data from the target is transmitted wirelessly to the PDA or readout using ZigBee radios with a range of up to 133 feet (40 m) maximum.



A Wireless Alignment System

With the PDA, up to 4 targets (99 with the A-910-2.4ZB) can function simultaneously with any of Hamar Laser's continuously sweeping lasers in single-axis mode. The wireless targets transmit target data for use with Hamar Laser's alignment programs. The software features include single or multiplane capabilities, squareness and parallelism analysis and other powerful capabilities.



5 Ye Olde Road, Danbury, CT 06810

Phone: (800) 826-6185 or +1-203-730-4600 • Fax: (203) 730-4611

E-mail: sales@hamarlaser.com • Internet: <http://www.hamarlaser.com>

For a list of our distributors, please visit: http://www.hamarlaser.com/intl_distributors.htm

Specifications

The A-1519-2.4ZB and A-1520-2.4ZB Wireless Targets

General

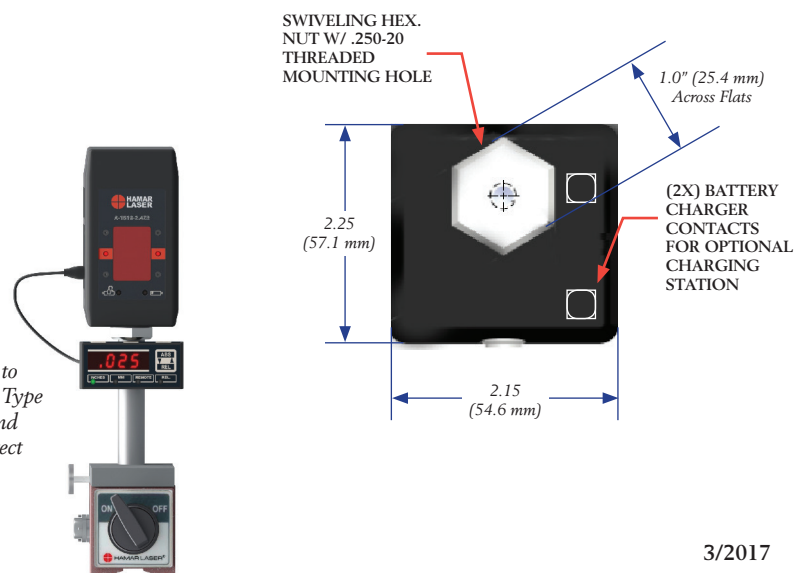
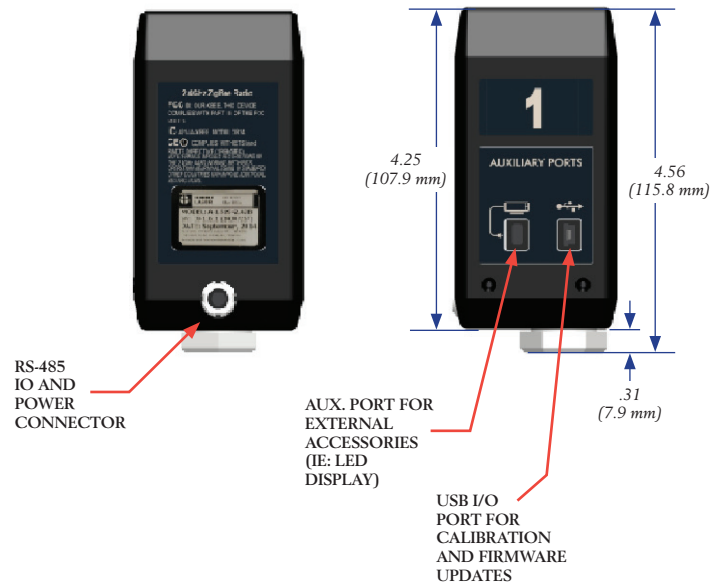
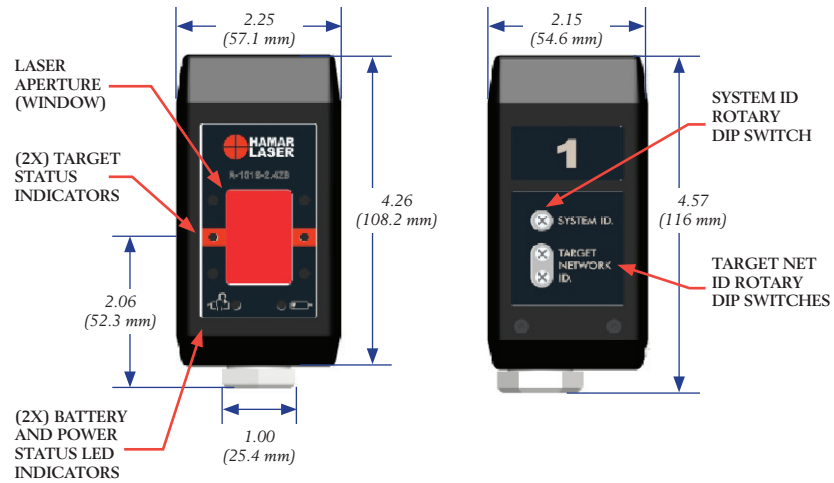
Size	2.00" W x 4.11" H x 1.75" D (50.8 mm x 104.4 mm x 44.5 mm)
Weight	13.5 oz. (383 grams)
Target Angle Acceptance Range	± 10°
Power Supply	7.5-12vDC, 500mA
Battery Life	11.5 hours continuous duty
Operating Temperature	5° F to 140° F (-15° C to 60° C)
Detector Size/Type	A-1519: 2-Axis PSD 1.3x0.51" (33x13 mm) A-1520: .39x.39" (10x10 mm)
Operating Range	100' (30.5 M) from laser to target
Auto On/Off Power	Targets automatically turn on when the laser beam sweeps across the target and turn off when the laser stops sweeping.
Magnetic Base Size	2.00" W x 3.09" H x 4.14" D (50.8 mm x 78.5 mm x 105.2 mm)
Magnetic Base Weight	2.78 lb. (1.26 Kg)

Accuracy

Model Number	Sensor Resolution	Linearized Accuracy	Measuring Range
A-1519	0.00002" 0.0005 mm	±0.00015" ±0.0038 mm	± .55" ± 14 mm
A-1520	0.00001" 0.00025 mm	±0.00006" ±0.0015 mm	± .1" ±2.5 mm

Measuring range may be limited by obstructions, antenna type and orientation. Outdoors line-of-sight range, with dipole antenna, may be greater.

Radio Specifications	A-1519-2.4ZB A-1520-2.4ZB
Indoor Range	133' (40 m)
Transmit Power	1.25 MW (+1 dBm) / 2 mW (+3 dBm) boost mode
Radio Frequency	2.4 GHz, DSSS (Direct Sequence Spread Spectrum)
Certification	Agency Certifications for the XBee® 802.15.4 Series 1 FCC (United States of America) Certification Contains FCC ID: OUR-XBEE IC (Industry Canada) Certification Contains Model XBee 802.14.4 IC:4214A-XBEE Complies with ETSI (Europe), C-TICK (Australia) and Telec (Japan)



The R-1308 Auxiliary Readout attaches to the magnetic base post of Hamar Laser's Type II Wireless Unitargets (A-1519-2.4ZB and A-1520-2.4ZB) and operates using a direct connection to the target.