

*Hand-held convenience, wireless communication via the XBee® networking protocol, and multipurpose alignment Software*

## R-1358-2.4XBE Wireless, Ruggedized PDA Data Receiver with Read16 Android Software

### ⊕ A powerful, pocket-sized readout

The R-1358-2.4XBE uses a rugged, IP 67 Android PDA combined with our Read16 Android Software to display the data for our A-1519/A-1520 wireless targets and any of our L-730/740 Series rotating lasers. When combined with our R-1307-2.4XBE Readout, it can also display the data for our 2-axis targets.

### ⊕ Read16 Software supports 5 targets and multiple alignment functions

The R-1358-2.4XBE Readout comes with Hamar Laser's Read16 Software and can display data for up to 5 single-axis targets.

### ⊕ Read16 Software features

- Read Screen data display for up to 5 targets
- 2-Point Buck-In Wizard
- Roll Alignment Buck-In Tool
- Data recording for up to 500 points
- Display zoom-in feature for long-distance viewing
- Display data in inches, mm or microns
- Adjustable data averaging to minimize air noise

### ⊕ Selectable System ID allows two alignment systems to work side-by-side

The radios employ a frequency-hopping protocol to avoid interference with other radio devices that might be operating at the same frequency. The radio allows the selection of different system IDs so that two or more systems can work in the same area and will not interfere with each other.

### ⊕ The R-1358 features:

A rugged PDA with a sealed wireless transmitter and an IP67 and MIL-STD-810H environmental rating that can survive water up to 3 ft. (1 m) with no harm.

- Small and compact: 7.5 in. L x 3.1 in. W x 1.3 in. H (191 mm x 79 mm x 34 mm) and about 1.1 lbs (0.5 kg).
- Long battery life of 17 hours with a 2½ hour recharge time.
- Field changeable batteries.
- Physical keyboard for easy data entry.
- Read16 Software pre-installed for basic alignment functions.
- Wireless range of up to 133 feet.
- Compatibility with any of Hamar Laser L-730/L-740 Series of continuously rotating lasers.



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# Software Features

## Read16 Android Software

### Viewing Data

Data can be viewed in either portrait or landscape modes. In portrait mode, the buttons to the right of the target reading boxes toggle between ABS (ABSolute) and Zero modes.

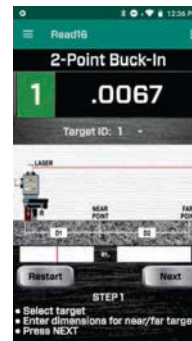
- **Absolute Mode** - in **ABS** mode, the value indicates where the laser plane hits the target cell relative to the target's electronic centerline (zero). These values are shown in white.
- **Zero Mode** - when **Zero** mode is selected, Read 16 applies an offset to the display. All target values then indicate the elevation of the point relative to the zeroed value. These values are shown in yellow.
- **Pop-up Mode** - landscape display allows values to be viewed from a distance



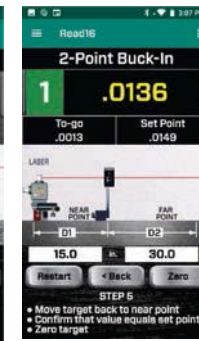
### Easy to Use Laser Setup Tools

The Laser Buck-In screen makes the laser parallel to the surface being measured by using several brief procedures, depending on the type of buck-in being performed.

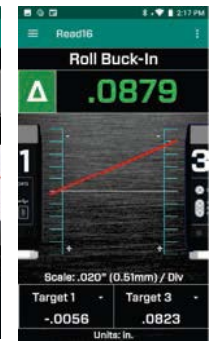
- **2-Point Buck-In** - using our shortcut, (the Remote Buck-In Formula) this screen is used to make the laser parallel to 2 reference points even in difficult setups where the laser is far from the reference points.
- **3-Point Buck-In** - add a third reference point to the 2-Point Buck-In procedure and the laser will be aligned to a surface instead of a line for measuring a table top, a surface plate, or several way surfaces.
- **Roll Buck-In** - used to align the laser plane (usually the side or rear plane) to reference targets in roll alignment.



2-point Buck-In  
Step 1: Enter  
Dimensions



2-point Buck-In  
Step 5: Steer to  
Set Point



Roll Buck-In screen  
showing the alignment  
of the laser to  
Targets 2 and 3.

### Recording Data

The Record screen is used to record data points. You can record up to 500 data points and save the data in an XML or CSV (Excel) format. Read16 records the data point number, target value, date/time and units used in the measurement.

- Export data to Excel or XML-compatible applications
- Re-record over bad data points
- Use multiple targets to record data



### Easy Setup Using the Preferences Screen

- Radio Settings changes the system radio ID so multiple systems can be used in the same area.
- Measurement/Display Units can be specified in millimeters, inches or microns.
- Resolution changes the number of decimal places (for example, from .1 to .123).
- Noise Dampening (Custom Averaging) averages readings from the target in order to reduce the amount of data variations (fluctuations) seen on the displays. These fluctuations can result from atmospheric turbulence or vibration of the surfaces where the laser and target sit.

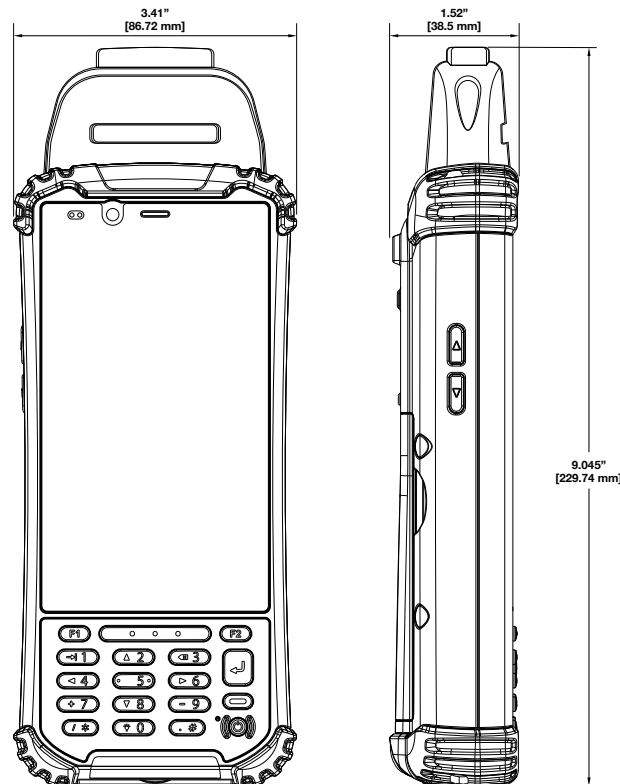


# Specifications

## R-1358-2.4XBE Wireless, Ruggedized PDA Data Receiver

### General

Size:	7.5 in. L x 3.1 in. W x 1.3 in. H (191 mm x 79 mm x 34 mm)
Weight:	1.08 lb. (490 g) including rechargeable battery
Resolution:	.01 in., .001 in., .0001 in. and .00001 in. (0.1, 0.01, 0.001 mm)
Battery life:	17 hours with active use (recharges in 2½ hours)
Power:	Field swappable 3.6V 6600 mAh Li-ion rechargeable battery
Range:	Wireless range of up to 133 ft. (40.5 m)
Transmit Power:	+8dBm (6.3mW)
Radio Frequency:	2.4 GHz + 5 GHz 802.11 a/b/g/n/ac
Radio Certifications:	FCC ID: MCQ-XBEE3. Complies with FCC rules, Part 15 CE: Complies with ETSI (Europe) IC ID: 1846A-XBEE3 (Canada) RCM/R-NZ (Australia/New Zealand) ANATEL 06329-18-01209 (Brazil) TELEC [R] 210-119309 (Japan)
Environmental Rating:	IP67, MIL-STD-810H, Dust proof and waterproof to 4.5 ft. (1.5 m)
Operating Temperature:	-30 to 60 degrees C (-22 to +140 degrees F)



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)