

# The R-1307B Target Readouts

R-1307BC  
R-1307B-2.4ZB

*Available in two models, supporting both cabled and wireless readouts and blinking and continuous laser modes*

## Readout Features

- Hamar Laser's new R-1307B Basic Series of target readouts is available in two configurations, designed to fit the specific needs of our users.
  - The R-1307BC, which replaces the R-307 Readout, supports 2-axis cabled (local) targets.
  - The R-1307B-2.4ZB, a combination readout for cabled targets with the capability to wirelessly transmit target data to a second R-1307 or to our A-910-2.4ZB Computer Data Receiver
- The R-1307B-2.4ZB and R-1307BC support cabled targets for both blinking and continuous laser modes, now available on the L-705, L-706 and L-708 Lasers.
- The R-1307B-2.4ZB and R-1307BC support 4x4 mm, 10x10 mm or 20x20 mm PSD cabled targets.
- The R-1307B-2.4ZB can be configured to display data from one cabled 2-axis target or to receive data from a second R-1307-2.4ZB Readout connected to one 2-axis target.
- The R-1307B-2.4ZB may be used as either the Master Readout or as a secondary readout to display data from a second R-1307.
- Radio frequency for the R-1307B-2.4ZB is 2.4 GHz Xbee®.
- User-selectable measurement averaging (2 to 64 samples) for difficult atmospheric conditions.
- The readouts can store 1 fixed beam and 1 pulsed beam calibration factor.
- Easy-to-use front control panel allows quick setting changes and clearly displays target readings.
- User can select the number of display digits up to a maximum of .0001 in. or 0.001 mm.
- Powered by a 2500 mAh Lithium-Polymer rechargeable battery for 7-22 hours of continuous use (depending on model, radio type and display brightness setting).
- Lightweight (1.2 lb./ .55 kg) with sturdy aluminum housing.



## The A-1307KS Readout Stand

Hamar Laser's new A-1307KS Readout Stand allows for the secure and convenient positioning of the R-1307 Readout.



- Four stand positions: 180°, 135°, 45° (shown in photo) and 0° (closed).
- The stand support leg, when opened to 180°, can be used as a hanger.
- Magnets on the back hold the Readout securely to steel objects.
- When the A-1307KS is assembled to the Readout, magnets are installed on the bottom so the unit can stand upright.
- The A-1307KS can be retrofitted to any existing R-1307 Readout.



5 Ye Olde Road, Danbury, CT 06810 USA

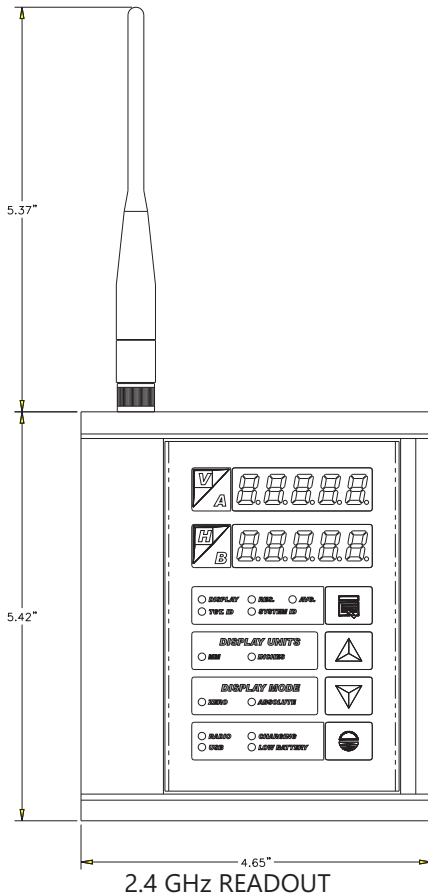
Phone: (800) 826-6185 or +1-203-730-4600 • Fax: +1-203-730-4611

E-mail: [sales@hamarlaser.com](mailto:sales@hamarlaser.com) • Internet: <http://www.hamarlaser.com>

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# Specifications

## The R-1307B Target Readouts



2.4 GHz READOUT

<b>Radio Specifications</b>	R-1307B-2.4ZB Wireless 2.4 Xbee®	
<b>Range</b>	Up to 400 ft (120 m) with line of sight, outdoors from one R-1307B to a second R-1307B. Indoor range may vary depending on indoor obstructions and magnetic interference. Transmitting to our A-901-2.4ZB Computer Interface will reduce the distance approximately 40-50%.	
<b>Transmit Power</b>	1.25 mW (+1 dBm) / 2 mW (+3 dBm) boost mode	
<b>Radio Frequency</b>	2.4 GHz, DSSS (Direct Sequence Spread Spectrum)	
<b>Certification (see certification details)</b>	FCC (US): CE: (Europe) TELEC (Japan)	OUR-XBEE ETSI IC (CANADA): 4214A-XBEE C-TICK (Australia)
<b>Battery Type</b>	2500mAh, Lithium-Polymer rechargeable battery	
<b>Battery Charging Time</b>	5-8 hours typical	
<b>Battery Life Expectancy</b>	800 charge/discharge cycles maximum	
<b>Battery Capacity (rated capacity of a new battery)</b>	7-22 hours of continuous use. Varies by model, radio type and display brightness settings.	
<b>Power Adapter/Charger</b>	Input: 100-240V ac Output: 7.5V dc 1.2A	
<b>Weight</b>	1.2 lb. (0.55 Kg)	
<b>Housing Material</b>	Aluminum	
<b>Physical Dimensions</b>	5.45 in. x 4.63 in. x 1.45" (excluding antenna) 138 mm x 118 mm x 37 mm	
<b>PSD Resolution and Accuracy Cabled Targets</b>	4x4 mm PSD: 0.1 microns - <1% error 10 x 10 mm PSD: 0.25 microns - < 2% error 20 x 20 mm PSD: 0.5 microns - < 0.5% error	
<b>Display Resolution</b>	.0001 in. (0.001 mm). When using Bore9 Software, resolution is .00002 in. (0.0005 mm).	
<b>Rotation Angle (R-1307+R)</b>	Resolution: 0.1 degree Accuracy: ± 1 degree	

### Agency Certifications for the 900 MHz Radio Transceiver FCC (United States of America) Certification

Contains FCC ID: OUR-9XCITE  
The enclosed device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference and (2) This device must accept any interference received, including interference that may cause undesired operation.

**RF EXPOSURE WARNING:** This equipment is approved only for mobile and base station transmitting devices, separation distances of (i) 20 centimeters or more for antennas with gains < 6 dBi or (ii) 2 meters or more for antennas with gains ≤6 dBi should be maintained between the antenna of this device and nearby persons during operation. To ensure compliance, operation at distances close than this is not recommended.

IC (Industry Canada) Certification  
Contains Model 9XCite Radio (900 MHz), IC: 4214A-9XCITE

### Agency Certifications for the 2.4 GHz Radio Transceiver FCC (United States of America) Certification

Contains FCC ID: OUR-24XSTREAM  
The enclosed device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference and (2) This device must accept any interference received, including interference that may cause undesired operation.

**RF EXPOSURE WARNING:** This equipment is approved only for mobile and base station transmitting devices, separation distances of (i) 20 centimeters or more for antennas with gains < 6 dBi or (ii) 2 meters or more for antennas with gains ≤6 dBi should be maintained between the antenna of this device and nearby persons during operation. To ensure compliance, operation at distances close than this is not recommended.

IC (Industry Canada) Certification  
Contains Model 24XStream Radio (2.4 GHz), IC: 4214A-12008  
Complies with IC ICES-003

CE !  
Complies with ETSI. France: France imposes restrictions on the 2.4 GHz band. Go to [www.art-telecom.fr](http://www.art-telecom.fr) or contact MaxStream\* for more information. Norway-Norway prohibits operation near Ny-Alesund in Svalbard. More information can be found at the Norway Posts and Telecommunications site ([www.npt.no](http://www.npt.no)).  
Since the 2.4 GHz band is not harmonized throughout Europe, other restrictions may apply to your country.

### 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)

**Technical Data:**  
OEM radio transceiver, model number: 24XStream  
Frequency band: 2400.0 - 2483.5 Mhz  
Modulation: Frequency shift keying  
Channel spacing: 400 kHz  
ITU classification: 400KF1D  
Output power: 100 mW EIRP max.  
Notified body number: 0891

\*The radio transceiver contained in the A-1519/20 Unitarget is manufactured by MaxStream®. For more information pertaining exclusively to the radio transceiver, please contact MaxStream at (800) 765-9885 or visit their website ([www.maxstream.net](http://www.maxstream.net)).