

# Advanced Weapon Boresight System

## » AWBS

Analog / Digital Camera

The AWBS is an electro-optical boresight tool, used for accurately aligning guns to the sighting system. The AWBS utilizes a video camera to allow a single user to align a weapon to a sight from the safety of the gunner's post.

The AWBS provides an easy to use, accurate, fast and reliable tool for boresighting, yielding a high first round hit probability. The ease of use of the AWBS minimizes the time required to perform boresighting and maximizes the convenience and the frequency of the procedure.

Its rugged design retains the accuracy of the AWBS over a wide range of environmental conditions. The outstanding features, flexibility and versatility of the AWBS make it the perfect solution for boresighting.



AWBS Digital System

Including Digital Camera and Electronic Unit with built-in monitor  
Also available Analog Camera System

## » O-AWBS

Optical Boresight

The O-AWBS is an optical boresight unit for accurately aligning guns to sights.

The unit provides an accurate, fast and reliable tool for boresighting, yielding a high first round hit probability.

Thanks to its rugged design, the O-AWBS retains its accuracy in a wide range of environmental conditions, making it an ideal boresighting instrument.



O-AWBS unit

with 12.7mm diameter barrel adapter rod

### » Links for additional reference:

- (1) **Technical information** in CI Systems' site: AWBS [Link](#) O-AWBS [Link](#)
- (2) **Video: Introduction to Boresight systems:** [Link](#)
- (3) **Training Video: AWBS and Optical Boresight (O-AWBS) for users:** [Link](#)

# » AWBS

## Advanced Weapon Boresight System

### » Features

- ▶ Based on a high-resolution camera
- ▶ Electronically generated and adjustable cross hair
- ▶ Various Interface Rod diameters to fit rifle/cannons barrels
- ▶ Ruggedized system
- ▶ Digital System with unified Electronic Unit & Monitor
- ▶ User-friendly calibration
- ▶ No focusing required at the operating range
- ▶ Operates under severe field environment and Insensitive to environmental temperature
- ▶ Lightweight and compact



### » Specifications

	AWBS 80	AWBS 120	AWBS 165	AWBS 37 (WFOV)
Optical Focal length (1)	80 mm	120 mm	165 mm	37 mm
Optical Aperture	20 mm	16 mm	16 mm	20 mm
Optical Field of view	4.5 °	1.7 °	2.2 °	10.0 °
Boresight accuracy	< 0.12 mrad	< 0.10 mrad	< 0.10 mrad	< 0.10 mrad
Operation range	20m to ∞	50m to ∞	50m to ∞	40m to 80m
Video Format	Optional: Analog NTSC , Analog PAL , Digital HD (H.264 format) , HD-SDI , Ethernet			
Reticle pattern	Programmable, user defined			
Power supply	110 / 220 VAC , DC Power , POE			
Cable length	User defined			
Operational temp	-20°C to +50°C			
Environmental	IP64 Rating			
Storage temperature	-40°C to +70°C			

#### Notes:

- (1) Additional Focal Lengths are available upon request
- (2) See next page for a questionnaire for configuration order

# » O-AWBS

## Optical Boresight Unit

### » Features

- ▶ High resolution optics
- ▶ Can be easily calibrated in the field
- ▶ Operates over a wide range of temperatures without the need to focus
- ▶ Built to withstand field environmental conditions
- ▶ Optional: Customers may use their own barrel adapter rods



O-AWBS units with optional barrel adapter rods

### » Specifications

	Model: O-AWBS x9.2
Magnification	x 9.2
Field of view	5 deg.
Focus range without adjustment (1)	From 20m to infinity
Aperture	22 mm
Accuracy	0.1mrad
Temperature range without focus adjustment	From -20 °C to +50 °C
Reticle type (2)	Cross, Line width 0.05 mrad
Dimensions and Weight	127x88x52 mm, 350 gr
Environmental conditions	High/low temperature, vibration, shock, rain, dust, fungus, salt fog, According to MIL-STD-810G

#### **Notes:**

- 1) Shorter focus range available upon request
- 2) Optical characteristics (Magnification & Field of View) are available upon request.
- 3) Barrel adapter rods to be ordered separately. CI Systems supplies any barrel adapter rod diameter upon request. Customers may also use their own gun interface.



# Configuration Questionnaire for AWBS and O-AWBS

	Item	Options Selection	Images (for Reference)
1)	<b>Product Type</b> <i>Select one type:</i>	<input type="checkbox"/> AWBS (Analog or Digital camera Boresight) <input type="checkbox"/> O-AWBS (Optical Boresight)	 <i>Example for O-AWBS (Optical Unit &amp; Barrel Interface)</i>
2)	<b>Barrel Interface</b> <i>Indicate requested diameters</i>	<input type="checkbox"/> Diameter: _____	
3)	<b>AWBS OU (Optical Unit) incl. camera &amp; cable</b> <i>Select one option</i>	<input type="checkbox"/> OU, camera focal length 80 mm <input type="checkbox"/> OU, camera focal length 120 mm <input type="checkbox"/> OU, camera focal length 165 mm <input type="checkbox"/> OU, camera focal length 37 mm (WFOV)	
4)	<b>EU (Electronic Unit)</b> <i>Select one option</i>	<input type="checkbox"/> EU, <b>Analog</b> PAL & power cable <input type="checkbox"/> EU, <b>Analog</b> NTSC & power cable <input type="checkbox"/> EU, <b>Digital</b> Ethernet & power cable (including built-in monitor) <input type="checkbox"/> <b>Digital</b> HD-SDI Cable from OU to Customer's System <input type="checkbox"/> <b>Software</b> with direct connectivity from EU to PC (for Digital Ethernet)	 <i>EU Analog      Monitor for EU Analog</i>
5)	<b>Monitor for EU Analog (Optional)</b>	<input type="checkbox"/> Monitor for EU <b>Analog</b> System & cable to EU	 <i>EU Digital</i>
6)	<b>Rechargeable Battery Unit (Optional)</b>	<input type="checkbox"/> <b>Rechargeable Battery</b> Unit, including battery charger & cables	 <i>Rechargeable Battery Unit</i>
7)	<b>Case</b> <i>Select one option</i>	<input type="checkbox"/> AWBS <b>Ruggedized</b> Case (standard) <input type="checkbox"/> AWBS <b>non-ruggedized</b> case (optional) <input type="checkbox"/> O-AWBS <b>Ruggedized</b> Case (standard)	 <i>Examples for Ruggedized Cases</i>
8)	<b>Additional Options</b> <i>Select your requirement</i>	<input type="checkbox"/> <b>Compensation for rod deflection</b> (for 7.62 & 12.7mm rods) <input type="checkbox"/> <b>Video formats:</b> Analog (PAL / NTSC), Digital, HD-SDI (other upon request) <input type="checkbox"/> <b>POE unit</b> (Power Over Ethernet) for cables more than 50m length <input type="checkbox"/> Customer may use his <b>own gun interface</b> <input type="checkbox"/> Interface to <b>customer's fire control system</b> without the use of an electronic unit <input type="checkbox"/> Interface with <b>existing displays in a vehicle</b>	

Specifications are subject to change without prior notice.

Cat. No. 607-56102 Aug. 2025