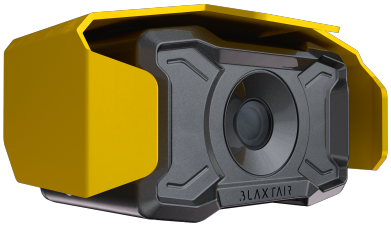
4.5 BLAXTAIR MR130 - DATASHEET

Exported on 10/19/2026

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Please find the PDF version at this link.

	
1 Blaxtair Smart Display	2 Blaxtair AI Camera

1 Description

Blaxtair saves lives. The most advanced pedestrian detection solution to prevent collisions with machinery, able at the same time to alert drivers to danger, to avoid unnecessary alarms and to helps HSE and site managers to control and reduce the risk of accidents. Compact, robust, connected, scalable, and easy to install, with unparalleled performance on the market, Blaxtair is the only AI camera capable of accurately detecting and locating pedestrians in real-time, in any posture (standing, crouching, or partially occulted) in all the most demanding work environments.
To go beyond the prevention of last-second accidents, the system integrates the Cloud-based IoT solution "Blaxtair Connect" which revolutionizes the safety of people around machines by dividing the coactivity between machines and pedestrians by 3.

- Improves safety, working conditions, and productivity
- Avoids unnecessary alerts that tire the driver
- Controls and reduces the risks of accidents thanks to the integrated Blaxtair Connect
- Future-proofed: online maintenance & remote software updates
- Scalable: ready for future additional features or cloud services

2 Certifications and approvals

Standards	Type
Water/dust protection	
AI Camera	IP6X (Completely dust-tigh) according to NF EN 60529 IPX7 (Protection against temporary immersion in water under pressure) according to ISO 20653 IPX9K (Protection against **high-pressure, high-temperature water jets**) according to ISO 20653
Camera connector	IP65
Smart display	IEC 60529 - IP67 ⚠ Sealing level is ensured under the following conditions • Product housing shall not be opened during its overall life cycle • All screws/connectors shall remain in factory delivery configuration • Sealing caps shall remain on connectors if not connected
Climatic test	ISO 16750-4 IEC 60068-2-14 IEC 60068-2-1 IEC 60068-2-2
Vibrations & Shocks*	ISO 16750-3 IEC 60068-2-64 - Random vibration IEC 60068-2-27 - Shocks
Electromagnetic Compatibility (EMC/ESD)**	Directive 2014/30/UE EN 12895 ISO 13766-1 ISO 14982-1 ICES-003 Issue 05 FCC Title 47 Part 15
Electrical loads	ISO 7637-2 ISO 16750-2

Radio frequency	RED - Radio Equipment Directive 2014/53/EU UKSI 2017 N°2016 UKCA FCC ID IC ID
Object detection systems assistance	
Earth-moving machinery	ISO 16001

Region	Regulatory compliance/quality marks
Europe	CE
Great Britain	UKCA
USA	FCC ID
Canada	IC ID

2.1 IoT Country Approval

Region	Countries
Europe	France, Germany, Austria, Spain, Poland, United Kingdom, Czech Republic, Italy, Belgium, Switzerland, Romania, Denmark, Portugal, Ireland, Ukraine, Slovak Republic, Hungary, Norway, Luxembourg, Sweden, Greece, Netherlands, Finland, Slovenia, Latvia, Estonia, Serbia, Monaco, Lituanie
Middle East & Africa	La Reunion
North America	United States of America, Canada
South America	Mexico (on going)
Asia pacific	Australia

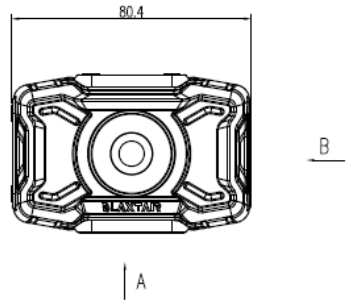
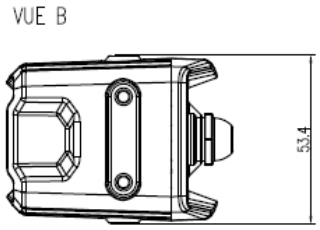
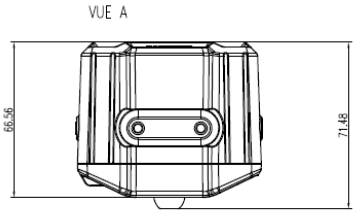
Performance Evaluation

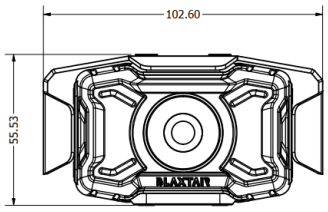
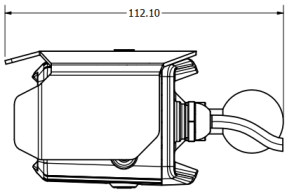
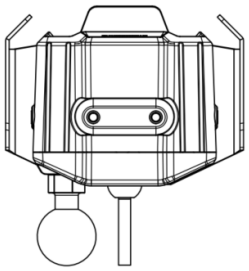
* U bracket can show weakness in case of high vibrations. We advise to use 6-axis mount bracket for Camera installation. A new generation of U bracket is developed to strengthen this aspect.

** The Blaxtair camera undergoes a series of rigorous performance evaluations to ensure optimal functionality in various environments. As part of our commitment to quality and innovation, we continuously refine our testing strategies and adapt to evolving standards. Current procedures are designed to assess the camera's resilience and operational integrity under various conditions, including electromagnetic environments.

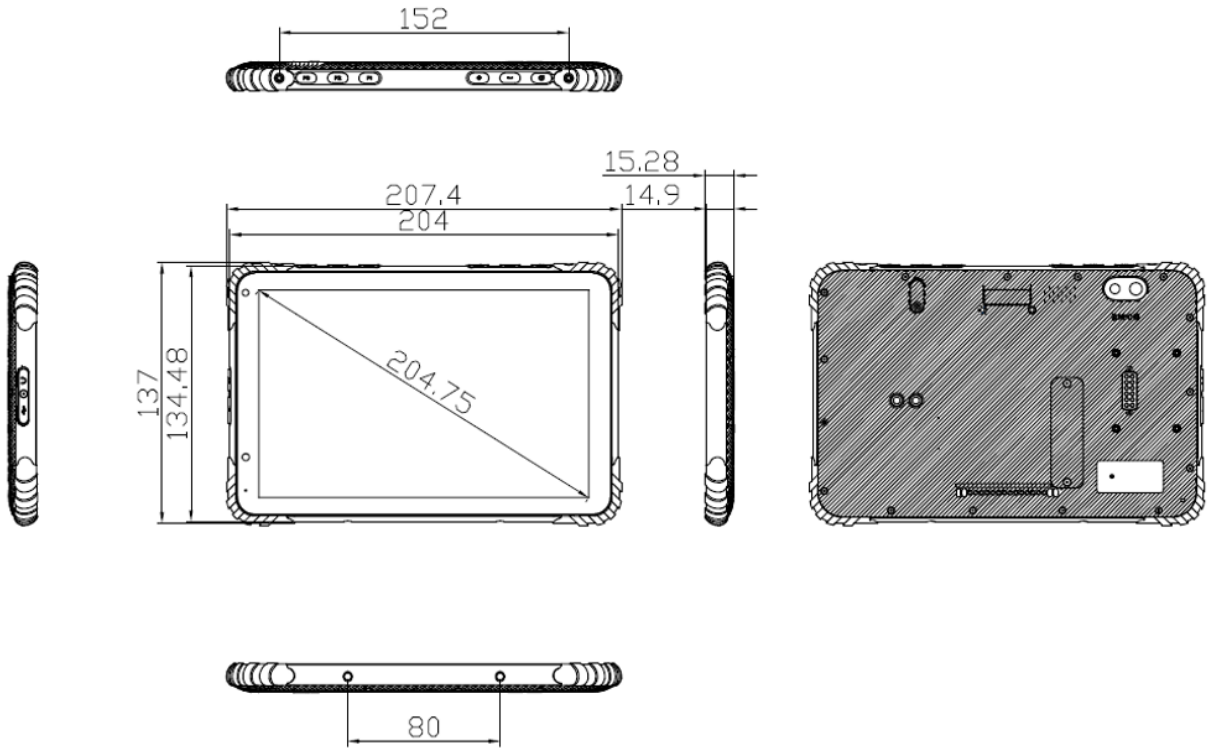
Note: Additional evaluations are part of our ongoing product enhancement efforts, ensuring that users benefit from the latest advancements and compliance with industry standards.

3 Installation/configuration notes

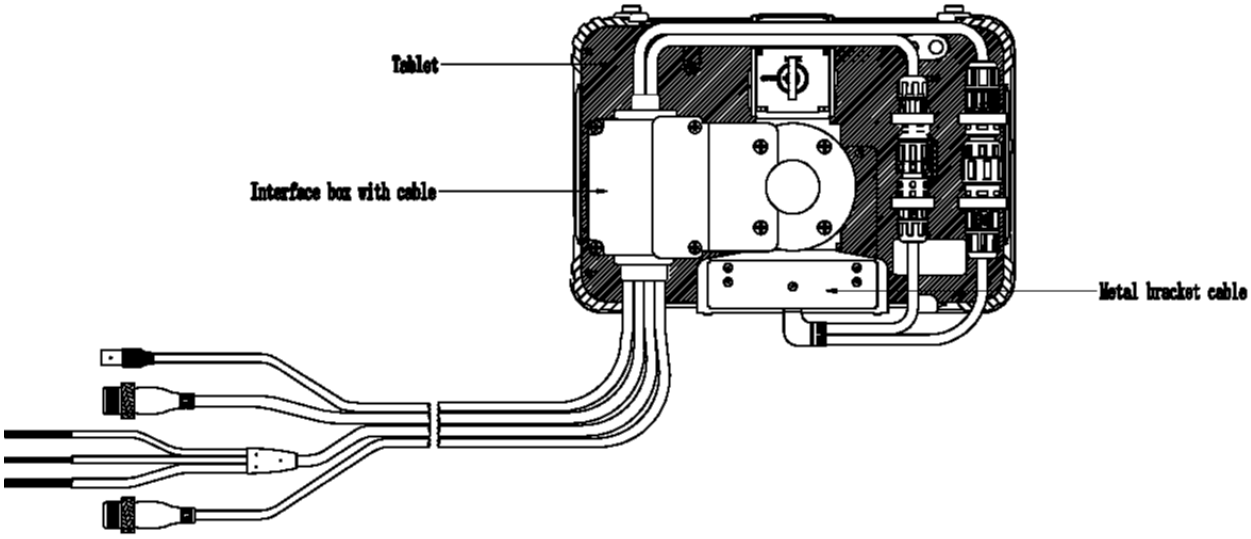
AI Camera Without Protective Hood		
Front view	**Side view**	**Bottom view**
		

AI Camera With Protective Hood (Subject To Change)		
Front view	**Side view**	**Bottom view**
		

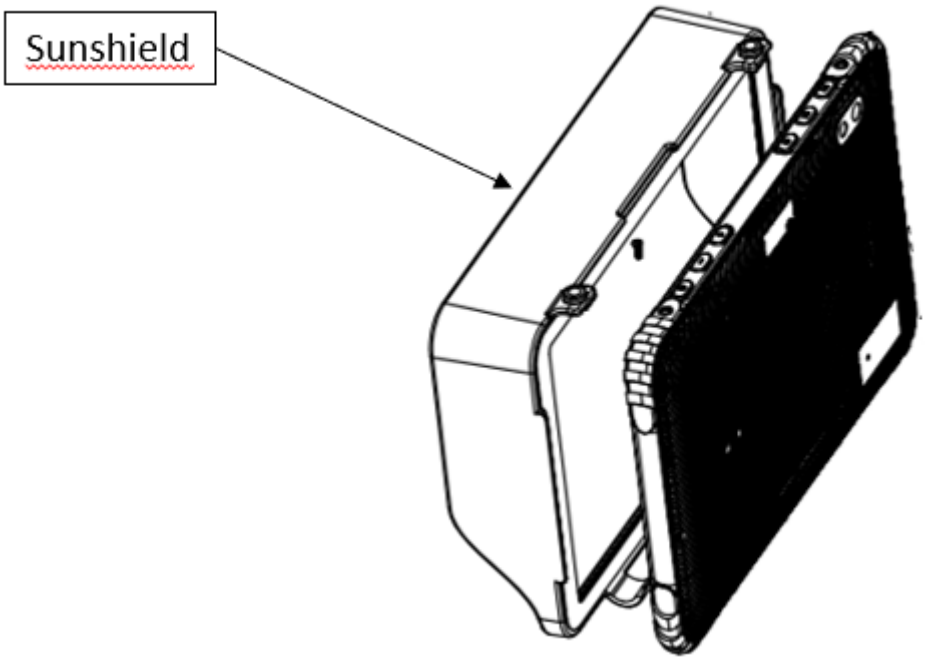
Smart Display Without Metal Craddle And Cables



Smart Display With Metal Craddle And Cables



Smart display with Sunshield



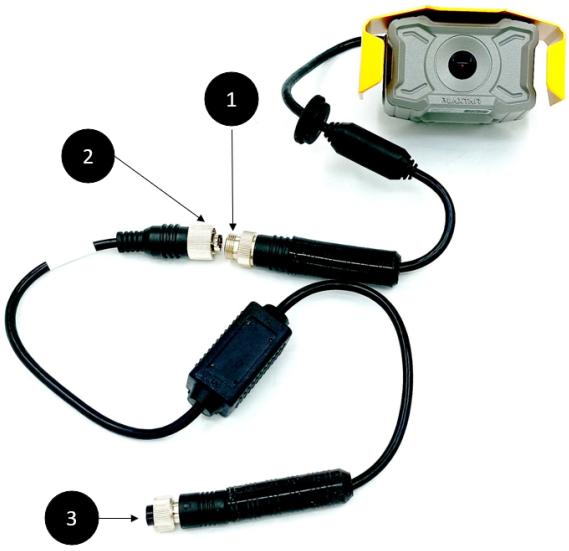
Please note that the illustrations above are not at scale.

4 Technical specifications

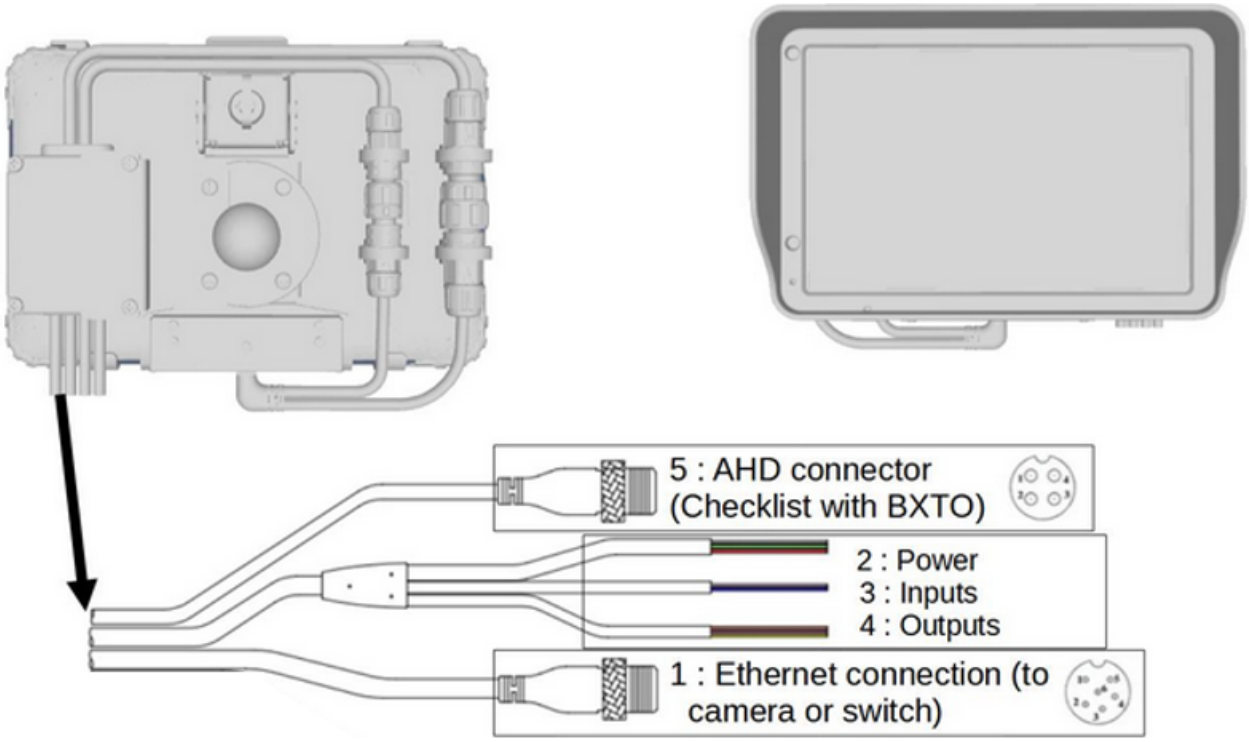
4.1 Electrical

Rated Voltage	12-24 VDC nominal 32 VDC maximum For vehicle voltage >24 VDC use a power converter.
Input voltage	~12-32 VDC
Power Consumption	MR130: 18 W-25.2W @12V (1.5A-2.1A) Depends on system usage and configuration

4.2 User connectors

AI Camera Connectors	
	(1) 8P Female camera connector (Data + Power) - Length: 400 mm (2) 8P Male connector (Data + Power) (3) 6P GX12 Female connector (ethernet + Power) - Length: 1600 mm The total length of the AI camera cable is 2 m (78,7 in).

8" Smart Display Connectors			
Cable 1	GX12	1500 mm	Male GX12 6 Pin Ethernet and power supply of camera
Cable 2	no connector	4800 mm	System Power supply
Cable 3	no connector	4800 mm	Discrete inputs x2
Cable 4	no connector	4800 mm	Discrete outputs x2
Cable 5	GX12	1500 mm	AHD connector



4.3 Video - AI camera

Dynamic range	81 dB
Frame Rate	25 fps
Shutter type	Electronic rolling shutter
Resolution	720p
Sensor	CMOS

4.4 Recording

Duration of recording	8 hours* for version 217 Between 20 and 30 hours, depending on tablet use for version 224
Recorder data	Live stream of the Blaxtair

Download	Using Blaxtair App

(*) Value can be increased to more than 30 hours of recorded data on request

4.5 Image Performance - Smart Display

Resolution	1280 x 800 px

4.6 Start/Stop

Starting duration	~0s with Fix sleep mode relay option From sleep mode (i.e tablet's battery load>0%) : ~ 17s for alarms/ ~ 21s for video stream From low tablet's battery load (close to 0%), start time can take several minutes (depends on how long battery's been empty and battery's temperature)

4.7 Performance

Display latency	~ 240 ms
Detection Latency	Latency < 300 ms
Operational Illumination range	>300 Lux (recommended for best performance) From 100 Lux to 80000 Lux
Pedestrian detection - Field of view	Diagonal - 152° Horizontal - 130° Vertical - 70°
Pedestrian position detected	Standing Crouched Occluded/truncated * Lying * Performance depends on the scene

4.8 IoT

Technology	LTE CE RED, FCC ID, IC ID, UKCA, RMM, SAR

4.9 Miscellaneous

Supported Languages	English, French, German, Spanish
Diagnostics	Various status conditions are tracked in the internal diagnostic log. Critical fault conditions will also be displayed on the screen

5 Mechanical

AI Camera	
Dimensions (L x W x D)	80,4 x 53,4 x 71,5 mm (3.2 x 2.1 x 2.8 in)
Weight without protective hood	425g
Housing	
Camera Housing	Aluminum alloy ADC12
Color	Yellow Ral 1003 for protective hood Grey Ral 9007 for camera casing

Smart Display	
Dimensions (L x W x H)	207 x 137 x 15 mm (8,1 x 5,4 x 0,6 in)
Weight	528 g

6 Environmental

Operational and Storage Temperature	
AI Camera	-20°C to +70°C (-4 °F to 158 °F)
Smart display	-20°C to +60°C (-4 °F to 140 °F)
Cold Start	
Smart display	-20°C (-4 °F)

7 Ordering information

Blaxtair - MR130 4m - Detection System		
105-950-001	HS code	8528.5900
1 x BXT AI camera with 2m cable with a 6 axis mount bracket & U-Bracket, 1 x 4m 6pins ethernet extension cable, 1 x BXT Smart Display 8" 1 x Metal Cradle with 2m cable with 6 axis mount bracket (Power : VDC 12-32V, 2 x Inputs, 2 x outputs & Ethernet camera connector) 1 x Relay kit for fix Sleep mode of 20 minutes (for 12V & 24V machine) 1 x Installation manual Total length from smart display to AI camera: 8m		

Blaxtair - MR130 - Detection System		
105-950-004	HS code	8528.5900
1 x BXT AI camera with 2m cable with a 6 axis mount bracket & U-Bracket, 1 x BXT Smart Display 8" 1 x Metal Cradle with 2m cable with 6 axis mount bracket (Power : VDC 12-32V, 2 x Inputs, 2 x outputs & Ethernet camera connector) 1 x Relay kit for fix Sleep mode of 20 minutes (for 12V & 24V machine) 1 x Fuse kit 1 x Installation manual Total length from smart display to AI camera: 4m		