



## BEANDEVICE® 2.4GHZ INC

Main features	Reference	BND-2.4GHZ-INC-30B-RB	BND-2.4GHZ-INC-90B-RB	BND-2.4GHZ-INC-30B-XT	BND-2.4GHZ-INC-90B-XT
Measurement Range		±30°	±90°	±30°	±90°
Sensor Tech.		Bi-axis MEMS Inclinometer			
Mounting option		Adhesive Mounting			
Sensor Resolution		±0.0025°			
Sensor repeatability (fullscale @25 °C)		±0.1°			
Max. wireless Range (L.O.S. and N.L.O.S.)		500 m in L.O.S, 30-100 meters in N.L.O.S			
Power Mode available		Active and Battery saver power modes		Battery Saver Mode	
Available Measurement mode		Low Duty Cycle and Alarm, mode 1s to 24h, Streaming (60SPS)		Low Duty Cycle and Alarm, mode 1s to 24h	
Data Logger Size		1 million logs			
Internal Battery		Internal Rechargeable, Lithium-Polymer battery, 950mAh		No Internal battery	
Casing		Waterproof IP67 aluminum enclosure , Dimensions in mm (LxWxH): 80x55x36 , Weight : 155g			



## BEANDEVICE® 2.4GHZ HI-INC

Main features	Reference	BND-2.4GHZ-HI-INC-15B-RB	BND-2.4GHZ-HI-INC-15B-XT	BND-2.4GHZ-HI-INC-30B-XT	BND-2.4GHZ-HI-INC-30B-RB
Measurement Range		±15°	±15°	±30°	±30°
Sensor Tech.		Bi-axis MEMS Inclinometer			
Mounting option		Adhesive Mounting			
Sensor Resolution		±0.001°			
Sensor repeatability (fullscale @25 °C)		±0.005° for bi-axis ±15° version ±0.006° for bi-axis ±30° version			
Max. wireless Range (L.O.S. and N.L.O.S.)		500 m in L.O.S, 30-100 meters in N.L.O.S			
Power Mode available		Active and Battery saver power modes	Battery saver power mode		Active and Sleep power modes
Available Measurement mode		Low Duty Cycle and Alarm mode 1s to 24h, Streaming (60SPS)	Low Duty Cycle and Alarm mode 1s to 24h		Low Duty Cycle and Alarm mode 1s to 24h, Streaming (60SPS)
Data Logger Size		1 million logs			
Internal Battery		Rechargeable Lithium-Polymer battery 950mAh			
Casing		Waterproof IP67 aluminum enclosure , Dimensions in mm (LxWxH): 80x55x36 , Weight : 155g			



## BEANDEVICE® 2.4GHZ HI-INC XRANGE

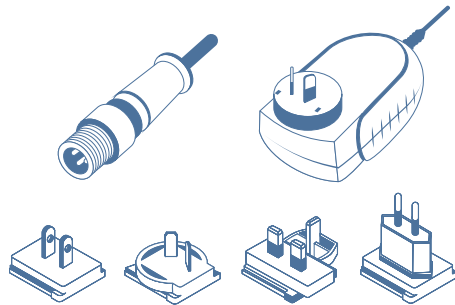
Main features	Reference	BND-2.4GHZ-HI-INC-15B-XR-RB-SCM	BND-2.4GHZ-HI-INC-30B-XR-RB-SCM	ND-2.4GHZ-HI-INC-15B-XR-XT-SCM	BND-2.4GHZ-HI-INC-30B-XR-XT-SCM
Measurement Range		±15°	±30°	±15°	±30°
Sensor Tech.		Bi-axis MEMS Inclinometer			
Mounting option		Screw Mounting			
Sensor Resolution		±0.001			
Sensor repeatability (fullscale @25 °C)		±0.005° for bi-axis ±15° version ±0.006° for bi-axis ±30° version			
Max. wireless Range (L.O.S. and N.L.O.S.)		500 m in L.O.S, 30-100 meters in N.L.O.S			
Power Mode available		Active and Sleep power modes		Battery saver power mode	
Available Measurement mode		Low Duty Cycle and Alarm, mode 1s to 24h, Streaming (60SPS)		Low Duty Cycle and Alarm, mode 1s to 24h	
Data Logger Size		8 million logs			
Internal Battery		Rechargeable LithiumPolymer battery, 2200mAh		No Internal battery	
Casing		Waterproof IP67 aluminum enclosure , Dimensions in mm (LxWxH): 100 x 71 x 38 , Weight : 225g (screw mounting), 252g (magnetic mounting)			

Main features	Reference	BND-2.4GHZ-HI-INC-15B-XR-RB-MM	BND-2.4GHZ-HI-INC-30B-XR-RB-MM	BND-2.4GHZ-HI-INC-15B-XR-XT-MM	BND-2.4GHZ-HI-INC-30B-XR-XT-MM
Measurement Range		±15°	±30°	±15°	±30°
Sensor Tech.		Bi-axis MEMS Inclinometer			
Mounting option		Magnetic Mounting			
Sensor Resolution		±0.001°			
Sensor repeatability (fullscale @25 °C)		±0.005° for bi-axis ±15° version ±0.006° for bi-axis ±30° version			
Max. wireless Range (L.O.S. and N.L.O.S.)		500 m in L.O.S, 30-100 meters in N.L.O.S			
Power Mode available		Active and Battery saver power modes		Battery saver power mode	
Available Measurement mode		Low Duty Cycle and Alarm mode 1s to 24h, Streaming (60SPS)		Low Duty Cycle and Alarm mode 1s to 24h	
Data Logger Size		8 million logs			
Internal Battery		Rechargeable LithiumPolymer battery 2200mAh		No Internal battery	
Casing		Waterproof IP67 aluminum enclosure , Dimensions in mm (LxWxH): 100 x 71 x 38 , Weight : 225g (screw mounting), 252g (magnetic mounting)			



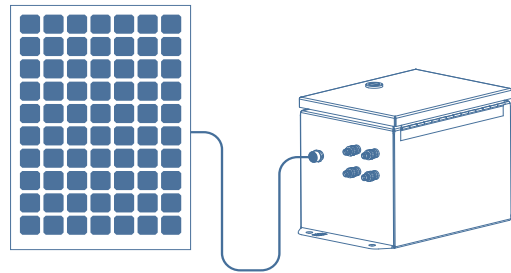
## BEANDEVICE® 2.4GHZ HI-INC-SR

Main features	Reference	BND-2.4GHZ-HI-INC-SR-MR-PS-MO
Measurement Range		10T : Tri-axis $\pm 10^\circ$ / $\pm 90^\circ$
Sensor Tech.		Tri-axis MEMS Inclinometer
Mounting option		Screw Mounting
Sensor Resolution		0.0055°
Noise density		for $\pm 10^\circ$ range : 0.0009 °/VHz on Y Axis, 0.0012 °/VHz on X, Z Axis for $\pm 90^\circ$ range : 0.0018 °/VHz on all axis
Sensor precision (full scale, @ 25°C, Static Measurement Mode every 2s)		$\pm 0.01^\circ$ for $\pm 10^\circ$ measurement range $\pm 0.02^\circ$ for $\pm 90^\circ$ measurement range
Offset temperature dependency (temperature range $-25^\circ\text{C}$ to $+85^\circ\text{C}$ )		$\pm 0.002^\circ/\text{C}$
Sensitivity temperature dependency (temperature range $-25^\circ\text{C}$ to $+85^\circ\text{C}$ )		$\pm 0.3\%$
Offset LifeTime Drift (@25°C) $\pm 0.23^\circ$ Sensor		$\pm 0.23^\circ$
Sensor frequency Response (-3 dB)		DC to 10 Hz for $\pm 10^\circ$ measurement range DC to 40 Hz for $\pm 90^\circ$ measurement range (Automatic Range) DC to 70 Hz for $\pm 90^\circ$ measurement range
Casing		Waterproof IP67 aluminum enclosure , Dimensions in mm (LxWxH): 100 x 71 x 38 , Weight : 225g (screw mounting), 252g (magnetic mounting)



## External Power Supply

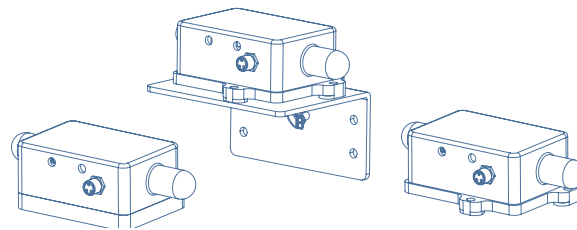
Wall plug-in, Switchmode power Supply 12V @ 1,25A with sealed M8 Plug (IP67/Nema 6) Ref : M8-PWR-12V



## Solar Panel Kit ( 14AH )

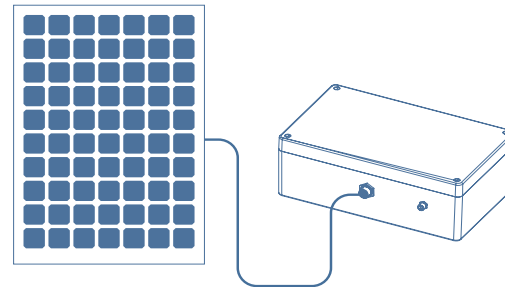
X-Solar 14ah | Solar Panel with Solar Charging Controller  
Ref: X-SOL-14AH-SLP-VOUT-CL

[More info](#)



## Mechanical Mounting Options

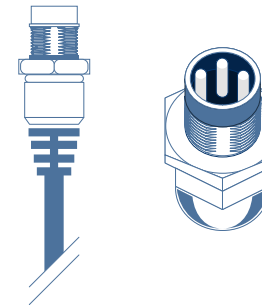
- 90° Bracket for BeanDevice ( Xrange smart-sensor ) with 4 x M5 screws + Locknut  
Ref: SMART-BRACK-MNT
- Magnetic Mounting Lid



## Solar Panel Kit ( 7AH )

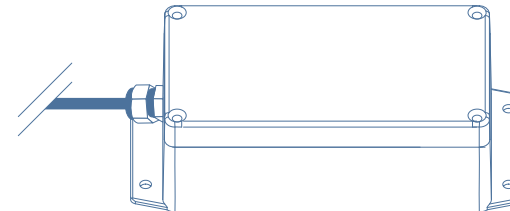
X-Solar 7ah | Solar Panel with Solar Charging Controller  
Ref: X-SOL-7AH-SLP-VOUT-CL

[More info](#)



## M8 extension cable for external power supply

Molded cable with M8-3pins male plug  
Material: PVC with shield protection  
IP Rating : IP67 | Nema 6  
Cable length : 2 meters , Ref: CBL-M8-2M  
Cable length : 5 meters, Ref: CBL-M8-5M  
Cable length : 10 meters, Ref: CBL-M8-10M



## External Battery Pack

Waterproof IP67 battery box for long-term monitoring applications  
Ref: PRIM-XTEND

[Datasheet](#)



## Calibration Certificate

Calibration certificate provided by Beanair GmbH  
A static calibration method is used on a granite surface plate DIN876  
Ref : CERT-CAL-SMART