



RAK IoT Enclosure Family



	Outdoor Gateway Enclosure		Unify Sensor Node Enclosure		
Ordering P/N	RAKBox-GW-0	RAKBox-GW-1	RAKBox-NT	RAKBox-NTS	RAKBox-NS
Material	Die-Cast Aluminum	Die-Cast Aluminum	Plastic	Plastic	
Dimensions	220 x 220 x 104mm	220 x 220 x 104mm	95 x 65 x 55mm	95 x 65 x 58mm	
IP Rating	IP67	IP67	IP67	IP67	
Waterproof	YES	YES	YES	YES	
Solar	NO	NO	NO	YES	
External Interface	2x N-type connectors	5x N-type connectors 1x PoE port 1x reserve port	5x ports for N-type connectors, circular connector or Vent valve	5x ports for N-type connectors, circular connector or Vent valve	
Board Support	RAK7249 DIY Gateway Boards RAK831 Concentrator Boards		96Boards form factor iTracker form factor		

Outdoor Gateway Enclosure

Industrial Die-Cast Aluminum Design

Designed to withstand the toughest of environments, this enclosure is made of Industrial Die-Cast Aluminum. It is rated IP67/NEMA-6, making it completely protected from dust ingress and submersible up to 1m in water.

Mechanical Characteristics

- Dimensions W x L x H: 220mm x 220mm x 104mm;
- Weight: approximately 70.54oz (2kg);
- Material thickness: 2mm;
- Pole and wall-mounting: 70~100mm pole diameter;
- Logo customization possibility;



Thermal Characteristics

- Enclosure seal operating temperature range: -60°C to 230°C;
- Heat Trap: +6.5°C under full sun exposure (~ 100,000 Lux);
- Temperature raise using a 5-10W heat source: +5.5°C;

Ports

For **RAKBox-GW-1**

- 5x N-Type Antenna connectors;
- 1x Ethernet port (PoE supported);
- 1x Reserved port;

For **RAKBox-GW-0**

- 2x N-Type Antenna connectors;



Package

- Enclosure together with connectors;
- Full assembly kit is included;

Board Support

- RAK7249 DIY Gateway Boards
- RAK831 Concentrator Boards



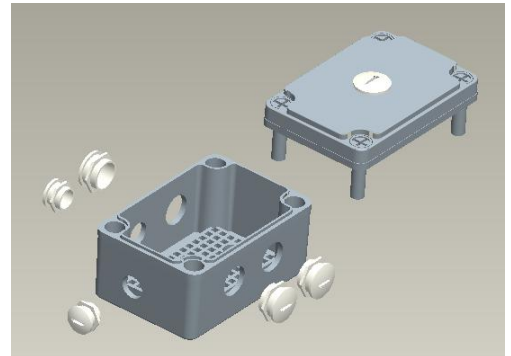


Sensor Node Enclosure

IoT Unify Sensor Node Enclosure Rated IP67 for outdoor Industrial IoT Application matching 96Boards form factor and iTracker form factor board.

Lightweight Plastic Design

The enclosure is a small, lightweight, yet very solidly built, perfect for setups where space is limited. It is rated IP67/NEMA-6, making it completely protected from dust ingress and submersible up to 1m in water.



Mechanical Characteristics

- Dimensions W x L x H:: 95mm x 65mm x 55mm;
- Weight: approximately 7.05oz (200g);
- Material thickness: 3mm;
- Pole and wall-mounting: 60~75mm pole diameter;
- Logo customization possibility;
- Support for Logo printing and custom color painting;

Ports

- 3x 16mm Ports supporting N-type connectors, Circular connector GX16;
- 2x 12mm Ports supporting Vent valve, Circular connector GX12;



Package

- Enclosure together with port plugs;

Board Support

- 96Boards form factor board, such as RAK5205;
- iTracker form factor board, such as RAK8212;

Optional Accessories

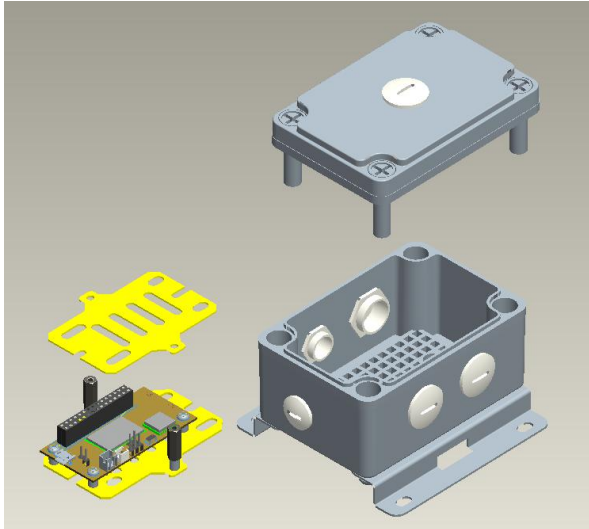
- Supporting plate kits for 96Boards form factor board;
- Supporting plate kits for iTracker form factor board;



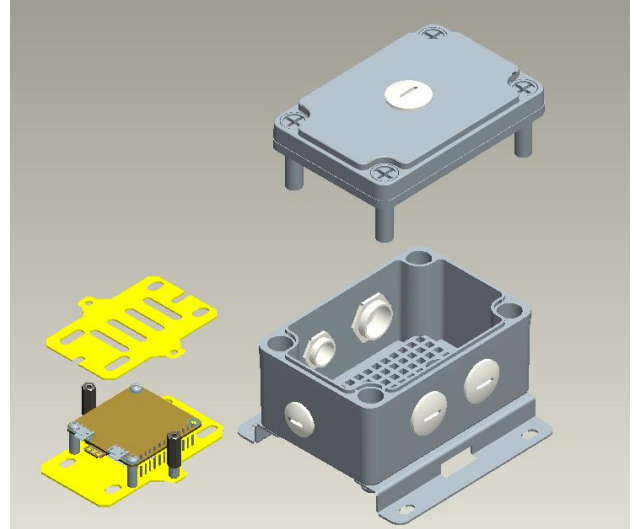


- Mounting Kit for Wall Mounting or Pole Mounting;

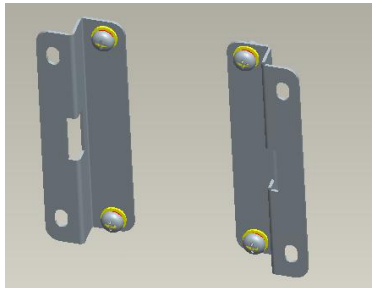
Supporting plate kit for 96Boards form factor



Supporting plate kit for iTracker form factor



Mounting Kit

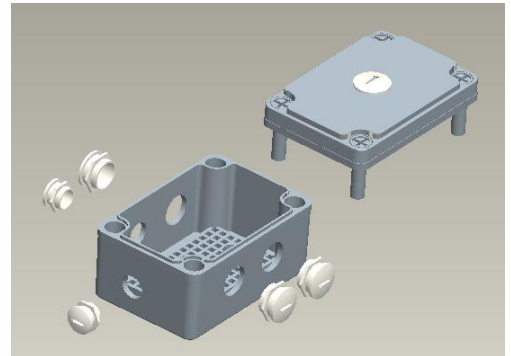


Sensor Node Enclosure with Solar Panel

IoT Unify Sensor Node Enclosure with Solar Panel Rated IP67 for outdoor Industrial IoT Application matching 96Boards form factor and iTracker form factor board.

Lightweight Plastic Design

The enclosure is a small, lightweight, yet very solidly built, perfect for setups where space is limited. It is rated IP67/NEMA-6, making it completely protected from dust ingress and submersible up to 1m in water. Includes top mounted solar power for battery charging.



Mechanical Characteristics

- Dimensions W x L x H: 95mm x 65mm x 58mm;
- Weight: approximately 7.45oz (211.2g);
- Material thickness: 3mm;
- Pole and wall-mounting: 60~75mm pole diameter;
- Logo customization possibility;



Solar Panel Characteristics

- The front side of enclosure with Solar Panel;
- Dimensions: 60mm x 60mm x 2mm;
- Voltage at nominal power: 5V ($\pm 10\%$);
- Current at nominal power: 80mA ($\pm 5\%$);
- Cell efficien: 17.5%;
- Work Environment:
Temperature:-20-65°C, Humidity: 45-95%, UV resistance;
- The ZH1.5-2P connector, red cable is for positive pole, black cable is for negative pole;



Ports

- 3x 16mm Ports supporting N-type connectors, Circular connector GX16;
- 2x 12mm Ports supporting Vent valve, Circular connector GX12;

Package

- Enclosure together with port plugs;

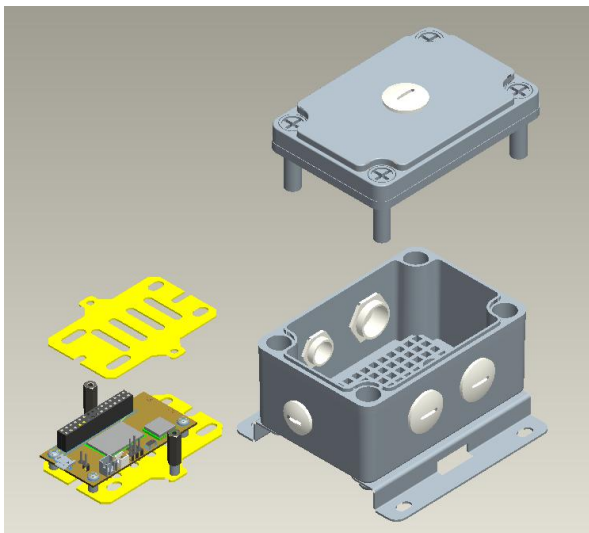
Board Support

- 96Boards form factor board, such as RAK5205;
- iTracker form factor board, such as RAK8212;

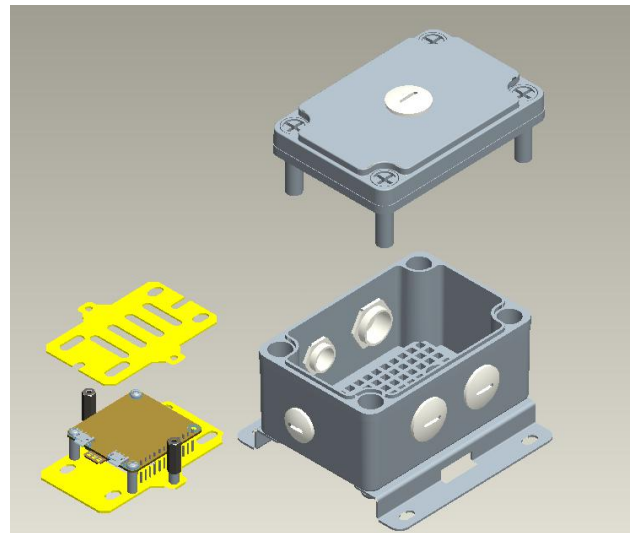
Optional Accessories

- Supporting plate kit for 96Boards form factor board;
- Supporting plate kit for iTracker form factor board;
- Mounting Kit for Wall Mounting or Pole Mounting;

Supporting plate kit for 96Boards form factor



Supporting plate kit for iTracker form factor



Mounting Kit

