



InterNext RS232 to LoRaWAN convertor module



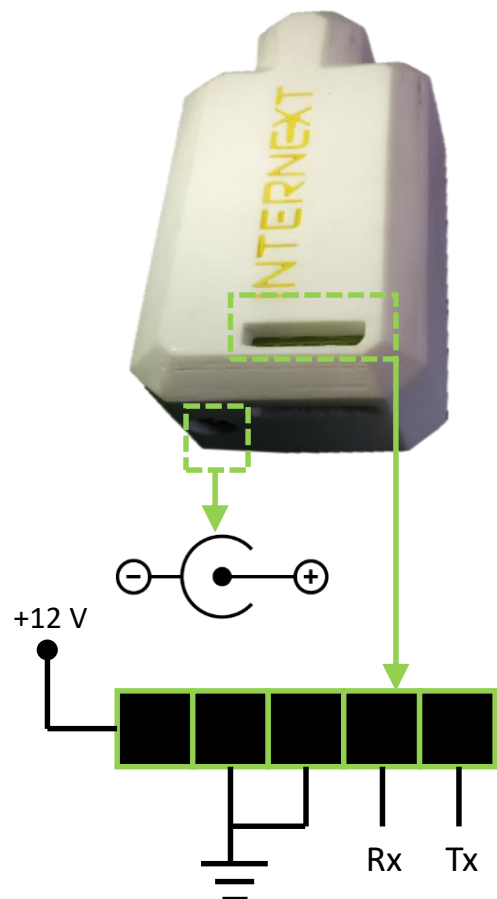
The InterNext RS232 to LoRaWAN convertor module includes a plug-and-play LoRaWAN transceiver based on Indian LoRaWAN frequencies (865 MHz). The module supports transmission of RS232 frames on any public or private LoRaWAN network and can be used in indoor as well as outdoor conditions. It ships with a 12 V power supply adaptor that powers the device using AC mains input (100-220 V, 50-60 Hz). The RS232 target device can also be powered using the module with the provided 12 V power output screw connectors. The module is a class C LoRaWAN device by default with both uplink and downlink capabilities. The module has a low footprint with dimensions 104 x 49 x 35 mm (see next page for detailed mechanical drawings). The device ships with pre-programmed OTAA at Indian LoRaWAN frequencies (IN865-867).

Use cases:

1. RFID reader (RS232 -> LoRa)
2. Smart metering (RS232 -> LoRa)
3. Configuration updates to industrial equipment (LoRa -> RS232)

Salient features

- Completely plug and play module
- Screw connectors for easy assembly and deployment
- Built-in 12 V power supply output for the RS232 device
- Small footprint (104 x 49 x 35 mm)
- Indian LoRaWAN frequencies (IN865-867)
- Built-in antenna
- Suitable for outdoor applications
- Shipped with a 12V/2A power adaptor
- Default class C operation
- Operating temperature: -25 / +80 °C
- Wall mounting (ϕ 3.4 mm)
- Receive sensitivity of -143 dBm at SF=12, 125 kHz bandwidth
- Transmission power upto +27 dBm



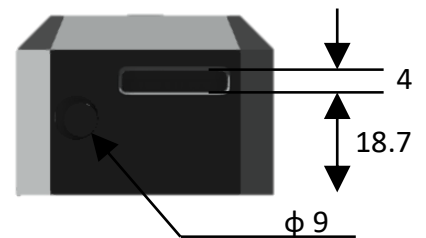
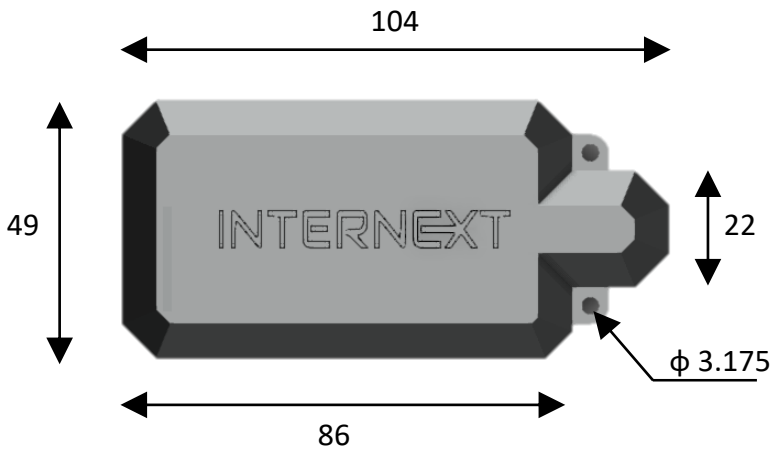


Electrical Parameters

Parameter	Unit	Min	Typical	Max
Input voltage	V	-	12	-
Output voltage	V	-	12	-
Input current	mA	4	11	250
Transmission power	dBm	-	-	27
Operating temperature	°C	-25	-	80
Receive sensitivity*	dBm	-	-143	-

*at SF(spreading factor) = 12, 125 kHz bandwidth

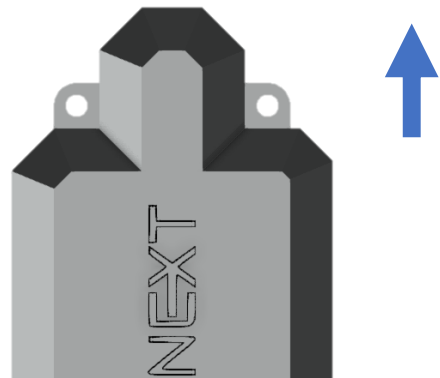
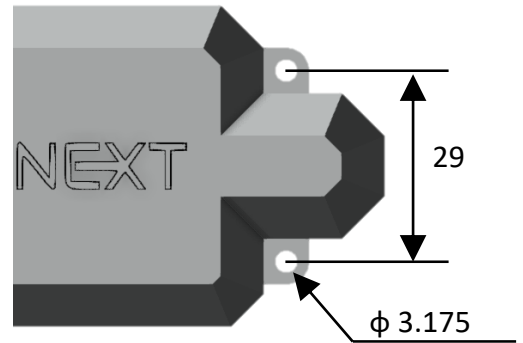
Mechanical drawings (all dimensions are in mm)





Installation Instructions

1. The module can be installed on any flat surface with the help of two No. 5 screws/bolts (diameter 3.175 mm or 1/8"), separated by a distance of 29 mm (center to center).
2. The internal helical antenna radiates in normal mode. For best performance, the module should be mounted parallel to the receive antenna.
3. In case the direction of the receive antenna is unknown, it is recommended to mount the module vertically, pointing upwards.



Vertical mounting