



AD-Node
Quick Start Guide

1. Connecting & Configuring the AD-NODE

The ICT International AD-Node is configured (i.e. identified and authenticated) over USB serial console using a terminal or terminal emulator. It is compatible with Windows 10, Mac OS and Linux. One terminal emulator we recommend is [Putty](https://www.putty.org/), which can be downloaded from <https://www.putty.org/>. Connecting an AD-Node to a computer via the Micro USB port will provide a serial port for configuration.

Recommended settings are as follows:

- Baud Rate: 115200 baud
- Parity: None
- Bits: 8 | Stop Bits: 1
- Flow Control: Disabled.

To retrieve or reprogram LoRaWAN keys (OTAA), enter the following:

To Retrieve:	To Reprogram:
lora eui dev	lora eui dev 0011223344556677
lora eui app	lora eui app 0011223344556677
lora key app	lora key app 00112233445566778899887766554433

Be sure to save after changing any settings. This device has been preconfigured as the following:

DEV EUI:

Upload Interval:

The upload schedule can be changed using the command report period. For example, to change the upload interval to 10 minutes: report period 600. Please see ICT International's YouTube video on registering an application to The Things Network at <https://youtu.be/dJ5gdZMBDK0>.



2. Attaching The Antenna

Before attaching the Antenna, remove the risk of inducing an static electric discharge to the Node by carefully grounding the SMA (M) pin of the Antenna to the outer brass rim of the SMA (F) connector on the Node.



3. Connecting Sensors & Power

The AD-Node has 4 Digital Inputs (D0, D1, D2, D3), two thermistor inputs (T1, T0), a voltage input and a current (4-20mA) input. Digital inputs are connected between the left and right connectors labelled D0 – D3. As digital sensors are not polarised, either wire can be inserted into either connector. Voltage and Current sensors are connected with the excitation wire on the right hand bank (labelled with a +), sensor output/signal on the left hand bus (labelled with a -) and sensor ground connected to any digital input on the left side – this acts as ground.



3.1 Powering The AD-NODE

The node runs off 3x 1.5V AA batteries – ICT International recommends Energizer Ultimate Lithium or similar high-end batteries. Move the switch to the ON position to begin transmitting.



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