



go anywhere communication and data transfer



Ultra eSAM

QUICKSTART GUIDE



INTRODUCTION

This quick start guide is intended to get you up and running with the Ultra eSAM Modem, and to familiarize yourself with its basic functions and capabilities.

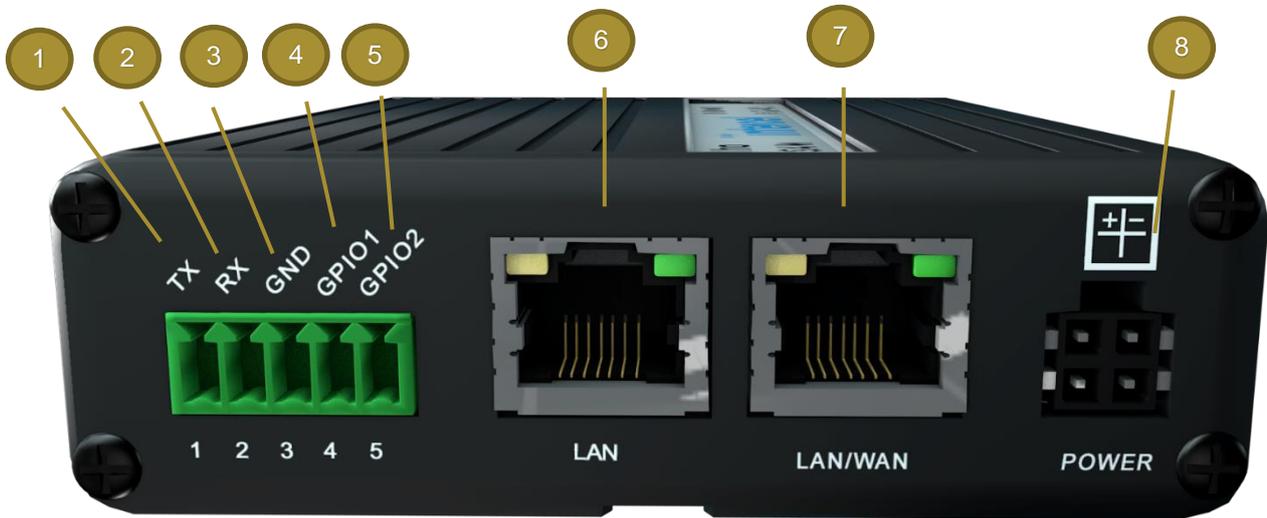
To follow this guide, you will need an active SIM Card from a mobile provider of your choice and a computer with an available Ethernet port or USB to Ethernet Converter.

For a more complete guide to this modem, please see the full User Guide available on our website or contact us at intercel@intercel.com.au.

HARDWARE OVERVIEW



NUMBER	ITEM	Description
1	WIFI Antenna Connector	Connection for the 2.4 GHz Wi-Fi Antenna
2	Reset Button	Reset Button. Press to reset the modem, hold to reset modem to factory settings
3	USB Port	USB port
4	MAIN Antenna Connector	Connection for Primary 4G LTE Antenna
5	SIM Card Tray	Ejectable SIM Card Tray
6	GPS Antenna Connector	Connection for GPS Antenna
7	Sim Card Eject Button	Press to eject the SIM Card Tray
8	DIV Antenna Connector	Connection for Diversity (Secondary) 4G LTE Antenna



NUMBER	ITEM	Description
1	TX Port	RS232 or RS485 Transmit Port ¹
2	RX Port	RS232 or RS485 Receive Port ¹
3	GND	Ground, used with RS232 or RS485 Connection ¹
4	GPIO1	GPIO Port, used as a digital input
5	GPIO2	GPIO Port, used as a digital output
6	LAN Port	Used to connect client devices to the eSAM Router
7	LAN/WAN Port	Can be configured to connect a second client device to the Router or can be used to provide an internet connection to the eSAM Router in Failover Mode.
8	Power Connector	Micro-fit connector used to supply power to the eSAM – wide 9-30V input voltage range.

RS485 mode only supported on specific Models

HARDWARE INSTALLATION

1. [Install the 4G Antenna](#)

The Ultra eSAM comes supplied with two 4G LTE Antenna. Mount these antenna to the rear of the eSAM, to the connectors labelled 'MAIN' and 'DIV'

2. [Insert the SIM Card](#)

- Remove the SIM Carrier tray from the eSAM by pressing the small 'eject' button located to the right of the SIM Tray



- Insert your SIM Card into the tray, with the gold contacts facing upwards and the cutout in the SIM Card matching the cutout in the carrier tray
- Re-insert the SIM Tray into the eSAM.

3. [Connect the Power Cable](#)

Plug the supplied 12V Power Adapter into the wall and connect the micro-fit connector on the other side of the power lead into your eSAM.



4. [Connect the eSAM to your computer using an Ethernet Cable](#)

- Connect an Ethernet cable between the LAN port of your eSAM and the LAN Port of your computer
- Enable DHCP on your computer, if not enabled by default (typically not required)

SOFTWARE CONFIGURATION

1. [Open the web interface in your web browser](#)

- Open your preferred web browser
- Enter '192.168.8.1' into the address bar
- Press Enter

2. [Log into the web interface with the default username and login](#)

Username: admin

Password: admin

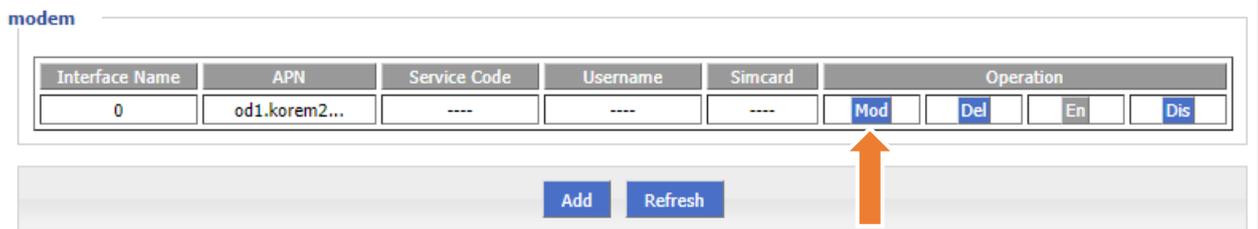
3. [Configure your SIM Card Settings \(optional\)](#)

- From the right-most menu, open the 'Network > Modem' Window
- Select 'Mod' to modify your current Modem Settings

modem

Interface Name	APN	Service Code	Username	Simcard	Operation			
0	od1.korem2...	----	----	----	Mod	Del	En	Dis

Add Refresh



- Enter the APN Provided by your mobile provider

Auto-Dialup

Basic Settings

Interface Name * Max length is 12

APN Max length is 64 ←

Service Code Max length is 64

Username Max length is 64

Password Max length is 64

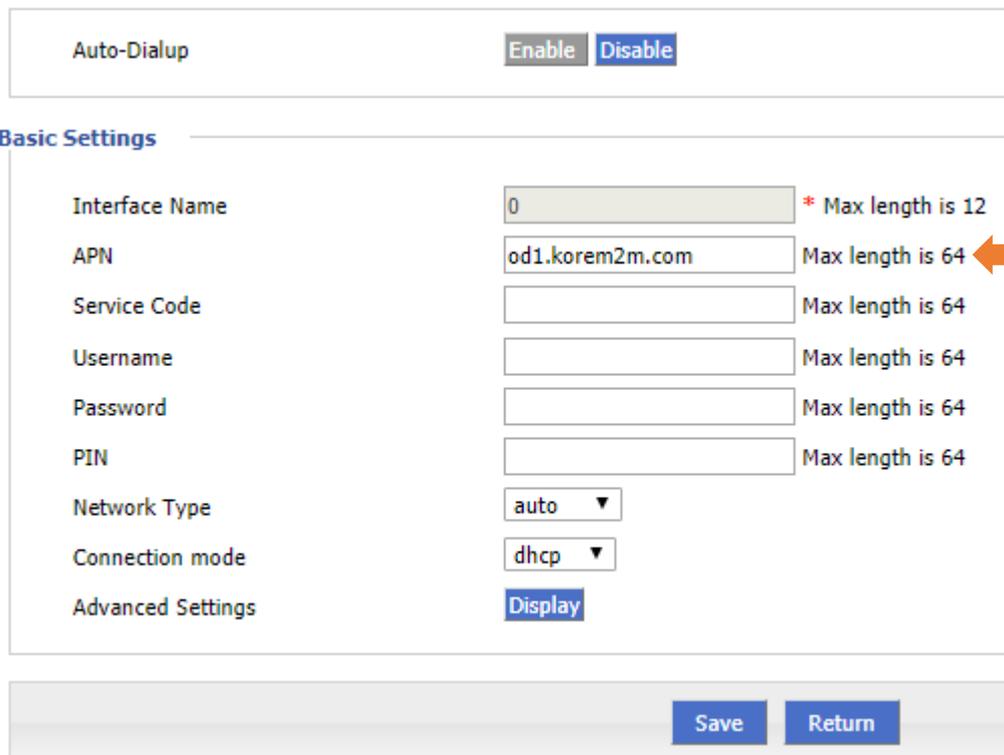
PIN Max length is 64

Network Type ▼

Connection mode ▼

Advanced Settings

Save Return



- Press 'Save' once complete.

4. Open the 'Status>Modem' Window to check your 4G LTE Connection status

- a. From the right-most menu, open the 'Status> Modem' window

modem

Modem Select	0
Up Time	384 seconds
Modem Status	connected
Network Type	WCDMA
Signal	 (25)
IP Address	10.129.214.146
DNS	8.8.8.8
SIM Status	ready
SIM ICCID	8961025415015474709
SIM IMSI	505025405159814
LAC	0
CELL ID	0

[Refresh](#)

- b. Check your 4G Signal Strength (0-31), and your connection status.

5. Configure Wi-Fi (optional)

- a. Open the 'Network>WLAN' window from the rightmost menu

WLAN Status [Enable](#) [Disable](#)

Basic Settings

SSID	<input type="text" value="eSAM_Test"/> * Max length is 32
Wireless Mode	<input type="text" value="ap"/>
Network Mode	<input type="text" value="n"/>
Channel	<input type="text" value="1"/>
Bandwidth	<input type="text" value="20mhz"/>
AP Isolate	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Broadcast Status	<input checked="" type="radio"/> Enable <input type="radio"/> Disable

Encryption Settings

Security Mode	<input type="text" value="wpa2"/>
Algorithms	<input type="text" value="aes"/>
WPA Shared Key	<input type="text" value="intercel_example"/> * Length is between 8 to 63
WPA Renewal Interval	<input type="text" value="3600"/> * 120-86400 s

- b. Enter your desired SSID and Security options
- c. Enable or disable Wi-Fi as desired
- d. Press 'Save' to save your Wi-Fi settings

6. Configure Static IP' s (optional)

Static IP's are fixed to a specific device and won't change over time.

- Open the 'Network > DHCP' window from the rightmost menu

DHCP Server Enable Disable

Basic Settings

Domain Name Max length is 32

IP Pool

Start * eg. 192.168.8.1

End * eg. 192.168.8.254

Gateway Type

Gateway * eg. 192.168.8.1

DNS Type

DNS1 * eg. 192.168.8.1

DNS2 eg. 192.168.8.254

Lease Time * 120-86400 s

IP * eg. 192.168.8.1

MAC * eg. 00:1A:4D:34:B1:8E

IP	MAC	Operation

- Enter the desired Static IP Address and the MAC Address of the device you want to assign this IP to.
- Press 'Add' to add this MAC-IP pair.
- Add as many static IP's as desired
- Press 'Save' to save your settings

7. Change your username and password (recommended)

- Open the 'System>Account' window from the right-most menu
- Enter your desired Username and Password.
- Enter the port you want to use to access the web interface (80 is suggested)
- Press 'Save' to save your new settings.

8. Backup your Configuration (optional)

- Open the 'System>Files' window from the right-most menu
- Press the 'Export' button to download your eSAM Configuration

Backup setting No file chosen



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