CELIA-E

Cellular Internet Appliance with Ethernet and USB

CELIA series of products are cellular internet appliances with Ethernet and USB host interface. Using Nimbelink Skywire™ end–device certified modems , CELIA-E adds wireless connectivity to many devices such as embedded microcontroller boards, industrial equipment, instruments, PC's, PLC's, laptops, and tablets, without the cost and delay of obtaining FCC and carrier certifications. CELIA-E is available with a wide range of Nimbelink Skywire™ LTE cellular modems with CAT4, CAT1, and CAT-M/NB-IoT speeds. The small form factor fits easily in many enclosures, instrument panels, and devices.

CELIA-E is fully backed by a 3-year warranty, technical support and application assistance from BiPOM Electronics, Inc.

Dimensions: 24mm (0.94"), 80mm (3.14"), 90mm (3.54")

Features:

- Compact, extruded aluminum enclosure with flanges for mounting
- Supports all variants of Nimbelink Skywire™
- Plug-and-play operation with Linux, Windows 10 and 11 hosts
- Customer can use any antenna without requiring re-certification

CELIA-E Specifications:

- ARM Cortex(R) based
- 512M of RAM, 32M of QSPI Flash, MicroSD
- Dual SMA antenna connectors
- Optional LTE antennas
- SIM accessible by removing the front panel
- USB and Ethernet(100M bps)
- Type A high-retention USB connector
- User accessible microSD socket
- 4-pin latching connector for power
- 2 Analog or 2 Digital inputs on power connector, software configurable
- Optional DC cable or AC adapter
- Supply voltage: 8-30VDC
- Power consumption: 1 Watt typical (no transmit)
- Temperature range: -40ºC to +85ºC
- Dimensions: 90 mm x 80 mm x 24 mm

Front Panel — DIV/GPS, SIM & microSD, MAIN, RESET

Rear Panel — USB, LAN, POWER

Software:

- Octavo OSD32MP157C-512M-IAA CPU Module
- Dual ARM® Cortex® -A7 core and one Cortex®-M4
- Open system
- Debian and other Linux variants supported
- WiPOM software option for management, data acquisition and logging
- Over the air and local upgrade
- Software can be upgraded remotely
- Cloud connectivity, support for many protocols
- USB host interface allows interfacing with off-the-shelf USB dongles. Examples: USB Bluetooth, USB ZigBee, USB RS485

Ordering Information:

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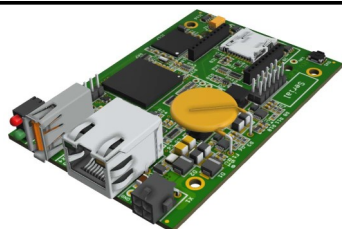
Interface
E: Ethernet

Module Type
e.g. RC7611

Power Supply
Blank: No power Supply
A: AC Adapter
D: DC Cable

Example: CELIA-E-RC7611-D

MODEL	PART NUMBER	MODULE MANUFACTURER	TYPE	
LTE CAT4 North America	CELIA-E-RC7611	Sierra Wireless	With Enclosure	
LTE CAT4 North America	CELIA-E-TC4NAG	Telit	With Enclosure	
LTE CAT4 Worldwide	CELIA-E-TC4WWG	Telit	With Enclosure	
LTE CAT1 North America	CELIA-E-TC1NAG	Telit	With Enclosure	
LTE CAT1 Worldwide	CELIA-E-TC1WWG	Telit	With Enclosure	
LTE-M/NB-IoT	CELIA-E-TG1WWG	Telit	With Enclosure	
LTE-M/NB-IoT	CELIA-E-QBG95	Quectel	With Enclosure	
LTE-M/NB-IoT	CELIA-E-QBG96	Quectel	With Enclosure	
No Module	CELIA-E-NM	No module	With Enclosure	
No Module	BRD-CELIA-E	No module	No Enclosure	

Available as:
- Board
- Enclosed product
- Engineering kit

CELIA-E Engineering Kit

PN: EKIT-CELIA-E-NM

- CELIA-E Development board
- 2 LTE/GPS antennas
- 2 SMA to u.FL antenna cables
- AC Power Adapter
- microSD Card with Linux
- Velocity IoT SIM Card
- Ethernet Cable
- Serial Cable for Linux console
- Software and Documentation
- Modem sold separately