

# NWK300

## OnLogic 4G LTE-Advanced Pro Embedded Cellular Modem

The OnLogic NWK300 is an embedded cellular modem powered by the Semtech EM7590 module. This high-performance, industrial-grade 4G LTE-Advanced Pro Cat-13 modem is designed for demanding applications requiring fast, reliable cellular connectivity. It supports a wide range of LTE bands, including CBRS, and offers GNSS capabilities for location services. Ideal for IoT, industrial routers, video surveillance, and public safety applications, this embedded modem is designed to bring high-powered LTE connectivity to your OnLogic device.



## KEY FEATURES

**LTE-Advanced Pro Cat-13:** Peak download speeds up to 400 Mbps and upload speeds up to 150 Mbps.

**Global LTE Band Support:** Extensive band coverage for worldwide deployment.

**CBRS Support:** Enables private LTE networks in the 3.5 GHz band.

**MIMO Support:** 2x2 MIMO for improved data throughput and signal quality.

**USB 3.0 and PCIe Interfaces:** Flexible integration options.

**Low Power Consumption:** Optimized for battery-powered devices.

**Industrial Temperature Range:** -20°C to +85°C.

**Mobile Software Management:** Firmware Over-The-Air (FOTA)

**Embedded Software:** Secure boot, Pre-certified firmware.

**OS Support:** Windows 10, Windows 11, Linux.

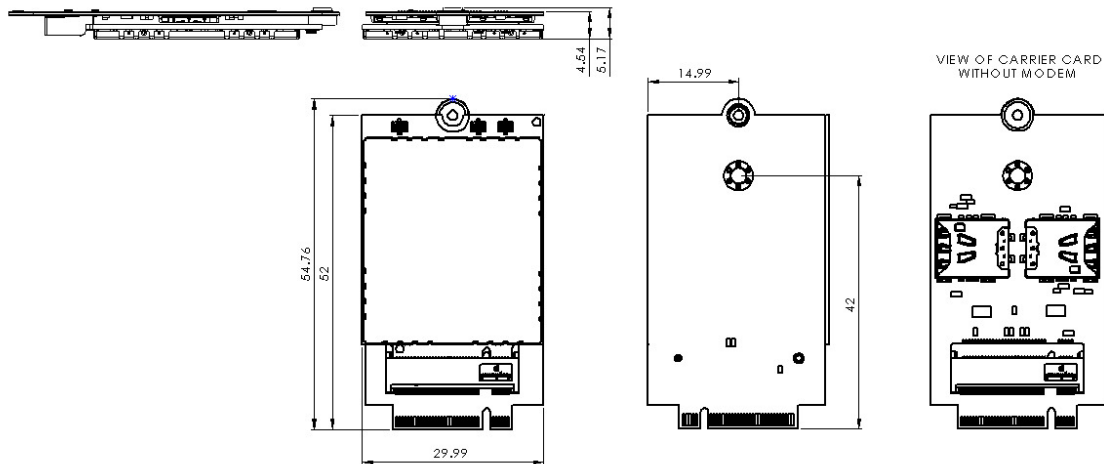
**Dual SIM:** Dual SIM Single Standby (DSSS) support.

Feature	Specification
LTE Category	Cat-13
Download Speed	Up to 400 Mbps
Upload Speed	Up to 150 Mbps
LTE Bands	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B18, B19, B20, B25, B26, B28, B29, B32, B34, B38, B39, B40, B41, B42, B43, B46, B48, B66, B71, B106
WCDMA Bands	B1, B2, B4, B5, B6, B8, B9, B19
MIMO	2x2 MIMO
Interfaces	USB 3.0, PCIe Gen2 (M.2 carrier only)
SIM Interface	1.8V/3V USIM
Antenna Connectors	4x LTE/GNSS RF connectors (MMCX)
Operating Voltage	3.3V $\pm$ 9%
Operating Temperature	-20°C to +85°C
Dimensions	mPCIe: 53.235mm x 30mm x 5.881mm M.2: 52mm x 30mm x 4mm
Approvals	FCC, IC, CE, PTCRB, RoHS
Firmware Updates	FOTA

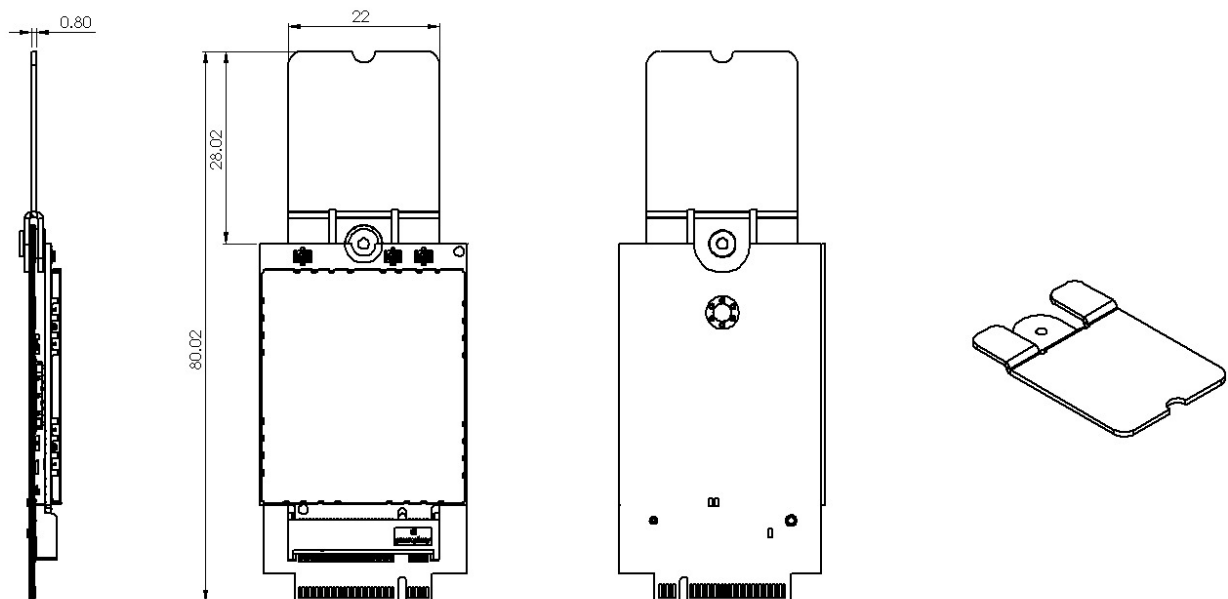
## NWK300 Dimensional Drawings

### M.2 Carrier Card

all measurements in mm



### M.2 Carrier Card with Extension Bracket



## NWK300 Dimensional Drawings

mPCIe Carrier Card

all measurements in mm

