SKU: ASX00027

Name: Arduino® Portenta Cat. M1/NB IoT GNSS Shield

Description:

Boost the global connectivity and positioning power of your Portenta or MKR board with the Arduino® Portenta Cat. M1/NB IoT GNSS Shield. Dive into cellular connectivity on Cat. M1 and NB-IoT networks, and even tap into eSIM technology. Track assets effortlessly across global locales using GPS, GLONASS, Galileo, or BeiDou. Designed with the efficient Cinterion TX62 wireless module, this shield ensures optimal performance for your low-power IoT applications.

- **Low power global community**: NB-IoT and Cat-M1 are both 3GPP standardized technologies built on next generation network architecture for low power IoT connectivity.
- **Portenta Form Factor**: The Portenta Cat.M1/NB IoT GNSS Shield has been specifically designed to provide reliable connectivity to the Portenta family of boards for a wide range of telemetry applications.
- **3GPP**: Gain direct access to the TX62 hardware using the various pads provided on the shield.

Tech Specs

Connectivity		Other	
Connectivity	- Cinterion TX62 wireless module (see datasheet) - NB-IoT - LTE CAT.M1 3GPP Rel.14 Compliant Protocol LTE Cat. M1/NB1/NB2 - UMTS BANDS: 1 / 2 / 3 / 4 / 5 / 8 / 12(17) / 13 / 18 / 19 / 20 / 25 / 26 / 27 / 28 / 66 / 71 / 85 - LTE Cat.M1 DL: max. 300 kbps, UL: max. 1.1 Mbps - LTE Cat.NB1 DL: max. 27 kbps, UL: max. 63 kbps - LTE Cat.NB2 DL: max. 124 kbps, UL: max. 158 kbps	**Other**	- Embedded IPv4 and IPv6 TCP/IP stack access - Internet Services: TCP server/client, UDP client, DNS, Ping, HTTP client, FTP client, MQTT client Secure Connection with TLS/DTLS Secure boot
Short Messaging Service (SMS)	- Point-to-point mobile terminated (MT) and mobile originated (MO) Text Mode - Protocol Data Unit (PDU) Mode	**Dimensions**	66 mm x 25.4 mm
Localization Support	GNSS capability (GPS/BeiDou/Galileo/GLONASS)	**Operating Temperatures**	-40° C to +85° C (-104° F to 185°F)

Category / Market Vertical:

- Industrial IoT
- Industry 4.0
- Internet of Things
- Outdoor asset tracking
- Global Positioning
- cellular connectivity
- fleet management
- Global Asset tracking
- Remote node monitoring
- Fleet management

DATASHEET: here