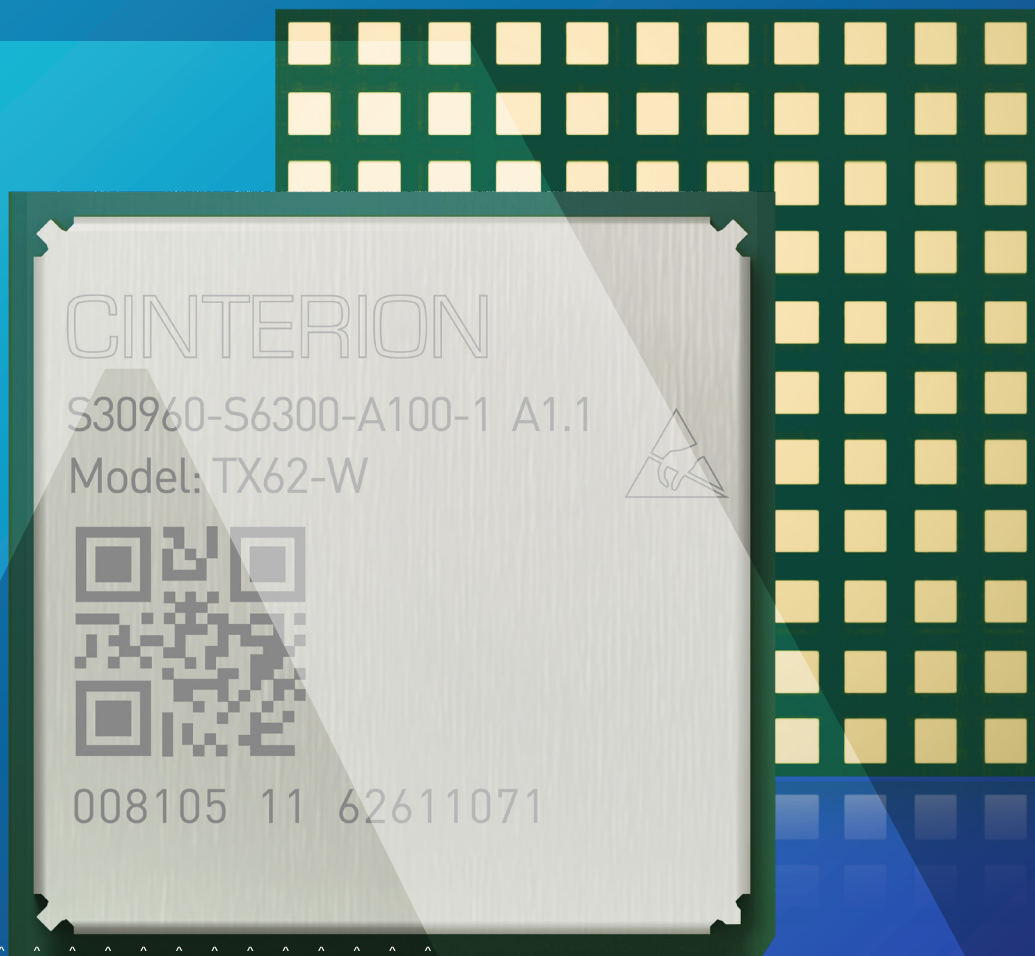


# Cinterion® TX62 IoT Module

LTE-M, NB1 and NB2 in breakthrough “Things” footprint



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## TX62



### Multiple MTC Technologies for Global Connectivity

- 3GPP Rel.14 Cat.M1, Cat.NB1, Cat.NB2
- Global LPWA from a single package
- Supports 450 MHz bands



### Breakthrough Things Footprint

- Compact form factor developed for the needs of small, battery-operated devices.
- Large surface pads for improved soldering and reduced SMT warpage
- Easy routing and optimized antenna position



### Ultra Integrated for Lower Total Cost of Ownership

- Ultra integrated module featuring a processor to run your entire application
- Embedded GNSS multi constellation (GPS, Galileo, Glonass, Beidou)



### State of the Art Secure Services

- Pre-provisioned digital identities in the roof of device
- Embedded eSIM option
- Secure key store



### Easy Connectivity and Lifecycle Management

- Secure enrollment into main cloud platforms including AWS IoT Core or Azure IoT Hub
- Remote update and device management

The Cinterion® TX62 IoT Module delivers global LTE-M, NB-IoT (NB1 and NB2) connectivity from a single SKU and it is the first Thales product to adopt the revolutionary “Things” footprint. The compact form factor has been engineered to facilitate the design of small, battery-operated LPWA cellular devices such as small payment terminals, connected sensors, track and trace solutions, meterings application, monitoring for smart homes, cities and agriculture.

### Key Features:

The highly efficient Cinterion TX62 delivers global LPWAN LTE connectivity from a single SKU leveraging mature Rel. 14 second generation Cat. M1/NB1/NB2. The ultra-integrated IoT module's unique architecture allows the flexibility to run applications with a host processor or inside the module itself using the integrated processor dedicated to customer application for onboard processing, which optimizes the size

and cost of your solution. TX62 supports optimized 3GPP power modes PSM and eDRx revolutionizing design possibilities for battery-operated cellular devices. State of the art security features include trusted identities pre-integrated in the root of the module during manufacturing plus secure key storage and certificate handling to protect the device and data and enable trustful enrollment in cloud platforms. An optional integrated Thales eSIM further simplifies manufacturing and logistics while providing flexibility in the field with easy remote provisioning and dynamic subscription updates. All this combined to Integrated GNSS support (GPS/Galileo/ GLONASS) provides a steady stream of timing and location information for precision positioning data anywhere in the world, making TX62 perfect also for small trackers devices.. What's more, the TX62 is supported by Cinterion® IoT Suite Services, an optional platform that manages the connectivity, lifecycle and security of IoT solutions ensuring continuity and long life.

## Things footprint revolutionizes small, battery-operated industrial IoT

The tiny 15 x 15 mm Things footprint is revolutionizing possibilities for exceptionally small, battery-operated cellular IoT devices. The footprint design features an optimized, pad

position and pitch to prevents PCB warpage while taking full advantage of affordable PCB technology. In addition, the position of antennas and ground maximizes RF performance.

## Embedded processing lowers TCO

TX62 device features an integrated processor with Real-Time Operating System (RTOS), enabling hostless architecture offered with SDK to build and run your entire application on the small feature-packed module.

## Optional Thales eSIM simplifies and secures IoT connectivity

An embedded Thales SIM strengthens security, authenticates devices, encrypts data and securely manages connections to cellular networks. It works seamlessly with Thales's subscription management solution to maintain connectivity for the lifecycle of devices. All this simplifies integration, manufacturing and logistics and lowers TCO.

# Cinterion® TX62 Features

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## General Features

- 3GPP Rel.14 Compliant Protocol
- LTE Cat. M1/NB1/NB2
- TX62-W: Power Class 20 dBm  
TX62-W-B: Power Class 23 dBm  
TX62-W-C: Power Class 23 dBm and 26 dBm<sup>1</sup>
- Compatible with Cinterion® Things footprint
- FDD-LTE Bands:  
TX62-W, TX62-W-B: Band 1, 2, 3, 4, 5, 8, 12, 13, 18, 19, 20, 25, 26, 27, 28, 66, 71, 85.  
TX62-W-C: Band 1,3,8,20,28, and 450 MHz band 31 and 72<sup>1</sup>
- Data only
- 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
- Dimension:  
TX62-W: 15.3 x 15.3 x 2.9mm  
TX62-W-B: 20.9 x 15.3 x 2.3mm  
TX62-W-C: 20.9 x 15.3 x 2.9mm
- eDRX (0.8mA 81.92s eDRx and PSM 4.5µA)
- Embedded IPv4 and IPv6 TCP/IP stack access via AT command and transparent TCP/UDP services
- Internet Services: TCP server/client, UDP client, DNS, Ping, HTTP client, FTP client, MQTT client
- Secure Connection with TLS/DTLS
- Secure boot
- Integrated GNSS support (GPS/BeiDou/Galileo/GLONASS)
- 2 High-speed 8 line serial interface
- UICC and U/SIM card interface 1.8V (embedded MIM option)
- SPI, I2C, PWM signal line, GPIO's
- ADC interface

<sup>1</sup> TX62-W-C has Bd 1,3,8,20,28 (on 23dBm), and 450 MHz band 31 and 72 (on cat M at 26 dBm, and on cat NB at 23 dBm)

## Thales in IoT: Driving digital transformation with the power of the IoT

Thales delivers innovative IoT technology that simplifies and speeds enterprise digital transformation. For more than 20 years, our customers – in a wide range of industries - trust our IoT solutions to seamlessly connect and secure their IoT devices, maximise field insights, and accelerate their global business success.

Thales solutions:

- | **Connect** assets to wireless networks and cloud platforms
- | **Manage** the long lifecycle of IoT solutions
- | **Secure** devices and their data
- | **Analyse** real-time data transforming it into business intelligence that improves decision making

Our 360° approach provides the essential building blocks needed to simplify design, streamline development and accelerate time-to-market.

For more information, please visit [www.thalesgroup.com/iot](http://www.thalesgroup.com/iot) or follow [@ThalesIoT on Twitter](https://twitter.com/ThalesIoT)