



Product Description

The Cinterion® TX82 IoT Module is the ultimate MTC solution delivering global LTE-M and NB-IoT (NB1 and NB2) connectivity with 2G fallback from a single SKU. Offered in the compact Things footprint, it is specially engineered for small, battery-operated LPWA cellular devices such as mobile payment terminals, connected sensors, track and trace solutions, metering applications, and monitoring solutions for smart homes, cities and agriculture

Key features

The highly efficient Cinterion TX82 delivers global LPWAN connectivity from a single device leveraging mature Rel. 14 second generation Cat. M1/NB1/NB2 and optional 2G for regions where 2G is preferred. The module's unique architecture allows the flexibility to run applications with a host processor or on the module itself leveraging powerful embedded processing, which optimizes the size and cost of your solution. A unique antenna design enables optimal tuning across all LTE and 2G bands which is especially useful for the low (700MHz) and very low bands (600 MHz).

TX82 supports optimized 3GPP power modes including PSM and eDRx revolutionizing design possibilities for battery-operated cellular devices. State of the art security features include trusted identities pre-integrated into 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 eSIM simplifies manufacturing and logistics by providing remote provisioning for any MNO network in the field with flexible and dynamic subscription updates. All this combined with integrated GNSS support (GPS/Galileo/GLONASS) provides a steady stream of timing and location information for precision positioning data anywhere in the world for small tracking devices. What's more, the TX82 is supported by the Cinterion® IoT Suite, an optional service platform that manages the connectivity, lifecycle and security of IoT solutions ensuring continuity and long life.

Industrial Family Benefits

The Cinterion EXS82/EXS62 IoT wireless module platform is part of Thales's Industrial family, which offers reliability, IoT-optimized features and extreme efficiency for a range of cellular standards from 2G to 5G-ready Low Power Wide Area technologies including LTE-M and NB-IoT. All Industrial modules share an identical footprint enabling seamless backward and forward migration to protect your IoT investment as technology needs change. Smart module platforms with embedded systems improve design simplicity and lower Total Cost of Ownership. All Cinterion modules are compatible with Thales's comprehensive suite of solutions, services and platforms that help enterprises Connect, Secure and Monetize IoT technology.

Streamlining the device-to-cloud journey

EXS82/62 leverages unique digital IDs inherent to each Cinterion IoT Module along with a secure digital handshake to verify the authenticity of devices and applications. This allows streamlined and swift enrollment in any major IoT cloud platform. It also simplifies development and manufacturing eliminating the need for OEMs to provide their own secure production facilities.

Incremental FOTA

Incremental Firmware Over The Air updates allow revision of only the portion of code that needs updating. This significantly reduces transmission time, power draw and throughput, which are all essential in preserving the investment in NB-IoT technology over the long life of IoT solutions.

eSIM simplifies and secures IoT connectivity

An embedded 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. In addition, it simplifies integration, manufacturing and logistics while enabling smaller designs.

Embedded processing with SDK

EXS62/82 features an integrated processor with Real-Time Operating System (RTOS), enables you to build a secure and robust embedded application that runs on IoT Module leveraging the module's onboard resources. i.e.: Processor, Memory, Interfaces, GNSS, and Security. With the Cinterion IoT SDK, it is easy to build a complete IoT Application sufficient for many use cases.

AVAILABLE FOR

Worldwide



Cinterion® TX82 Features

General Features

- 3GPP Rel.14 Compliant
- Protocol LTE Cat. M1/NB1/
NB2/2G
- Compatible with Cinterion® Things footprint
- FDD-LTE Bands:
1, 2, 3, 4, 5, 8, 12, 13, 18, 19, 20, 25, 26, 27, 28, 66,
71, 85
- 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
- LTE Power Class 5 (20 dBm)
- eDRX (0.8mA 81.92s eDRx and PSM 4.5µA)
- Embedded IPv4 and IPv6 TCP/IP stack access via AT command, provides: TCP/UDP Client, UDP Endpoint, TCP Listener, HTTP client, FTP client, MQTT client, NTP service, CoAP Client
- Secure Connection with TLS 1.3 / DTLS 1.2
- Secure boot
- Integrated GNSS support (GPS/BeiDou/Galileo/GLONASS)
- 2 high-speed serial interface
- UICC and U/SIM card interface 1.8V (embedded SIM option)
- SPI, I2C, PWM signal line, GPIO's
- ADC interface

QUESTIONS? VISIT WWW.TELIT.COM/CONTACT-US

 Like Us on Facebook  Follow Us on LinkedIn  Follow Us on Twitter  Subscribe to Our Channel