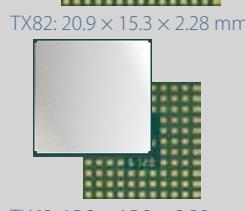
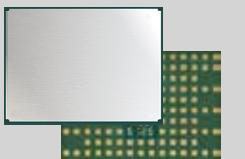


Size optimized, Efficient and smart IoT connectivity for global markets

## TX62/82-W

## LTE Cat. M1 / Cat. NB1 / Cat. NB2 / 2G



**LTE-M** **NB-IoT 2G**

Highly efficient global LPWAN LTE solution with optional 2G fallback.  
Optimized and mature Rel. 14 second generation Cat. M1/NB1/NB2 platform.

- 3GPP Rel.14 Compliant Protocol
- LTE Cat. M1/NB1/NB2
- Compatible with Cinterion® Things footprint
- FDD-LTE Bands:  
1, 2, 3, 4, 5, 8, 12, 13, 14, 18, 19, 20, 25, 26, 27, 28, 66, 71, 85
- Quad-Band 2G (only for TX82-W)
- Data only / voice variant(\*)
- 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)
- Integrated GNSS support  
(GPS/BeiDou/Galileo/GLONASS)
- Secure Connection with TLS

### GENERAL FEATURES

- FDD-LTE Bands 1, 2, 3, 4, 5, 8, 12(17), 13, 18, 19, 20, 25, 26, 27, 28, 66, 71, 85.
- **Quad-Band GSM: 850, 900, 1800 and 1900 MHz (TX82)**
- Integrated GNSS support (GPS/BeiDou/Galileo/GLONASS)
- Compatible with Cinterion® Things module footprint
- SIM Application Toolkit with BIP
- Control via standardized commands (Hayes, TS 27.007 and 27.005) and Cinterion® AT commands
- 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
- Supply voltage range: 2.5-4.8 V (extended)
- Weight: approx. 2.5 g
- Operating temperature: -40°C to +85°C

### INTERFACES (SMT-LGA, 114 pads)

- Pads for primary LTE antenna and GNSS antenna
- 2 High-speed 8 line serial interface
- UICC and U/SIM card interface 1.8V
- SPI, I2C, PWM signal line
- ADC interface

### APPROVAL

- RED, FCC, IC, UL, CCC
- GCF, PTCRB
- AT&T and other major MNO approvals
- EuP, REACH and RoHS compliant

### SPECIFICATIONS

- 3GPP Rel.14 Compliant Protocol
- LTE Power Class 5 (20 dBm)
- 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
- E/GPRS Class 10
- SMS support (via NAS, via GSM)

### SPECIAL FEATURES

- Embedded MIM prepared
- Firmware updatable via interface and Over the Air (OTA) / incremental FOTA
- LWM2M support with MODS (module services)
- Best in class power consumption current, eDRX (0.8mA 81.92s eDRX and PSM 4.5µA)
- Advanced Security
- Embedded Processing (\*)

### APPROVAL

- RED, FCC, IC, UL, CCC
- GCF, PTCRB
- AT&T and other major MNO approvals
- EuP, REACH and RoHS compliant

### DRIVERS

- Driver for Windows® 7 / Windows® 8 / Windows 10
- Driver for Linux
- RIL Driver for Android(\*)