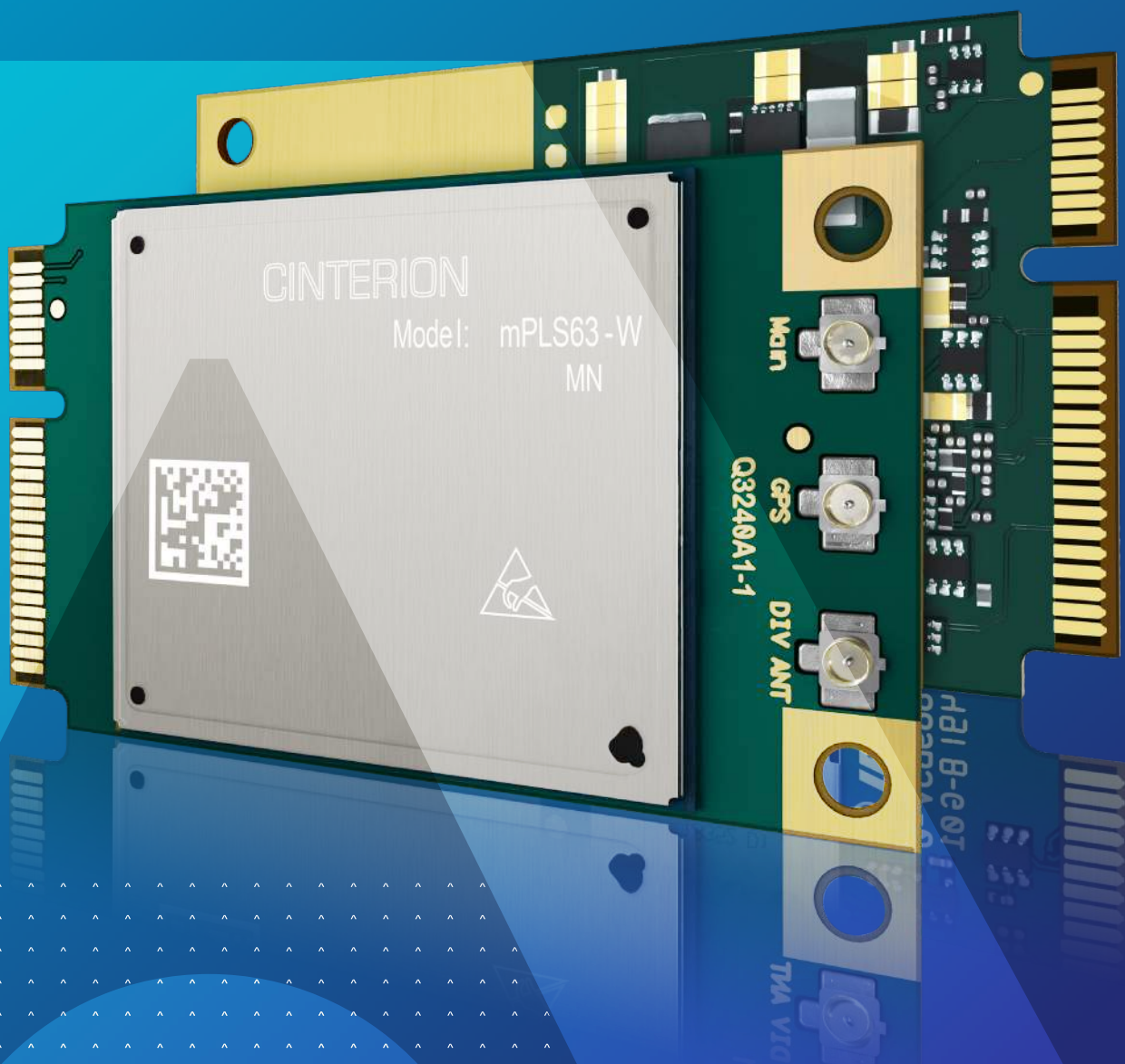


# Cinterion® mPLS63-W Performance IoT Modem Card

Plug and play global LTE Cat.1 with 3G/2G fallback from a single SKU



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## mPLS63-W

### LTE Cat.1



#### Global coverage with fallback options

- | Global LTE Cat.1 from a single SKU
- | 3G and 2G fallback
- | Data and voice



#### Compact, plug and play Mini PCIe™ modem card

- | Integrated IP connectivity
- | VoLTE and CSFB voice, embedded GNSS
- | Thales extended set of AT commands
- | Embedded Processing



#### Flexible network usage

- | Dual SIM interface and optional eSIM
- | Flexible SIM support
- | Global MNO approval



#### State of the art security

- | Secure boot
- | Secure key store
- | Key lifecycle management



#### Easy connectivity and lifecycle management

- | Secure enrollment toward main cloud platforms
- | Remote update and device management

The Thales Cinterion® mPLS63-W IoT Modem Card simplifies global cellular IoT connectivity delivering instant access to IoT-optimized LTE Cat.1 networks with 3G/2G fallback from a single SKU. The device offers IoT optimized speeds of 10Mbit/s download and 5Mbit/s uplink and it's extremely easy to integrate by simply plugging into a Mini PCIe™ express slot. It's ideal for IoT applications that benefit from efficient, long life connectivity and easy integration such as vending machines, point of sales, transportation solutions and industrial automation.

### Key Features

The Cinterion mPLS63-W IoT Modem Card offers global cellular connectivity from a simple, plug-and-play device that delivers 18 Band LTE Cat.1, Eight Band 3G HSPA/UMTS, and Quad-Band GSM. The feature-loaded card comes in a Mini PCIe™ format and includes integrated IP connectivity, voice over LTE (VoLTE),

circuit switched voice, and a comprehensive AT command set for simplified device control. A dual SIM interface, onboard SIM card holder, and optional eSIM strengthens security, reduces deployment complexity and simplifies logistics providing MNO flexibility in the field with easy remote provisioning and dynamic subscription management. This along with optional embedded processing and Integrated GNSS support (GPS/BeiDou/Galileo/GLONASS) helps to lower Total Cost of Ownership (TCO.) What's more, advanced security features including a secure boot, secure key storage, and key lifecycle management protect data and devices.

Housed in a rugged, compact 50.95mm x 30.00mm x 4.70mm mPCIe form factor, the modem card supports plug and play deployment and easy migration from 2G and 3G through to LTE. This greatly improves implementation agility and simplifies evolution as technology needs change.

All Cinterion IoT connectivity solutions integrate seamlessly with the Cinterion IoT Suite offering OTA software updates and lifecycle management, trusted digital identity management and secure cloud interworking, plus zero-touch connectivity activation. Additionally, they all come with global customer support, Full Type Approval (FTA), and mobile network operator certification to support a fast time to market.

## Thales eSIM simplifies and secures IoT connectivity

An optional embedded eSIM together with Thales subscription management reduces total TCO by easing integration, ensuring in-field flexibility on connectivity, and by simplifying manufacturing and logistics.

## Efficiency, reliability and anytime, anywhere connectivity

An advanced power management system delivers efficiency while ensuring always on, 24/7 connectivity. Based on the mature LTE technology, the module ensures global reliability with fallback to 3G/2G if needed.

## State of the art security suite protects devices and data

The secure boot feature protects the integrity of the firmware and guards against attacks and unauthorized firmware loading. The advanced key management platform not only secures key storage but also enables easy enrollment towards main cloud platforms. Moreover, the support for Cinterion IoT Suite allows remote update, device and connectivity management.

# Cinterion® mPLS63-W Features

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## General Features

- 3GPP Rel.9 Compliant Protocol Stack
- FDD-LTE: bands 1, 2, 3, 4, 5, 7, 8, 12, 13, 18, 19, 20, 26, 28, 66
- TD-LTE: bands 38, 40, 41
- UMTS (WCDMA/FDD): bands 1, 2, 3, 4, 5, 6, 8, 19
- Quad Band GSM: 850, 900, 1800, 1900 MHz
- Integrated GNSS support (GPS/BeiDou/GLONASS/Galileo)
- SIM Application Toolkit, letter classes b, c, e with BIP and RunAT support
- Control via standardized and extended ATcommands (Hayes, TS 27.007 and 27.005)
- Embedded IP stack with IPv4 and IPv6 support
- TCP/IP stack access via AT command and transparent TCP/UDP services
- Secure Connection with TLS/DTLS
- Internet Services TCP/UDP server/client, DNS, Ping, HTTP, SMTP, FTP client
- Supply voltage range: -3.0 – 4.5V
- Dimension: 50.95 x 30.00 x 4.70 mm
- Operating temperature: -40°C to +95°C
- Data and voice

## Specifications

- FDD-LTE LTE Cat. 1  
DL: max 10.2 Mbps, UL: max. 5.2 Mbps
- HSPA+ Cat.8 data rates  
DL: max. 7.2 Mbps, UL: max. 5.76 Mbps
- E/GPRS Class 12  
DL: max. 237 kbps, UL: max. 237 kbps
- SMS text and PDU mode support
- Multiple Operator VoLTE support, CSFB (circuit-switched fallback)
- High quality narrow and wideband voice support for handset, headset and hands-free operation (HR, FR, EFR and AMR-WB)

## Special Features

- USB Interface features a composite mode, compliant to Windows, Linux and Mac
- Firmware update via USB and ASC
- RLS Monitoring (Jamming detection)
- Informal Network Scan
- Cell ID based Location Support
- Module Services
- eSIM (optional)
- Embedded Processing (optional)

## Interfaces (52pin edge connector)

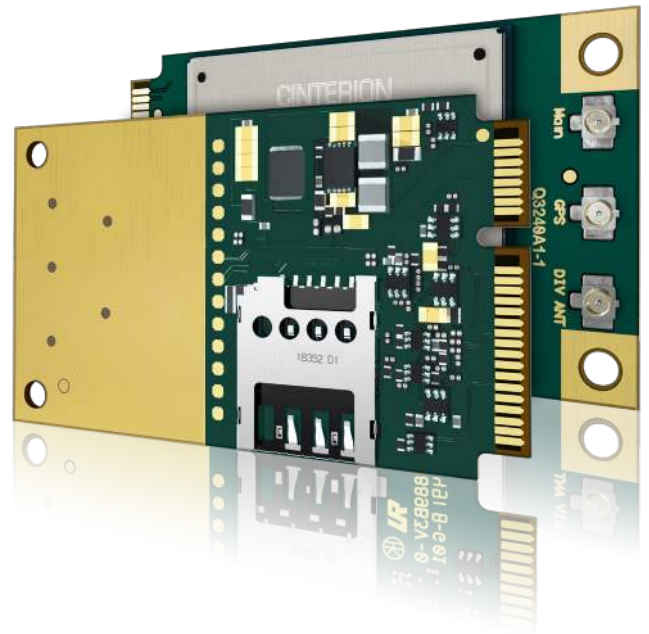
- USB 2.0, UART
- 4 GPIO lines
- 3FF UICC card holder (USIM IF#1)
- 2 Hirose 3mm U.FL onboard connectors for Main and RX-Diversity antennas
- GNSS
- Digital audio interface (PCM and I2S modes)

## Drivers

- USB, MUX driver for Microsoft® Windows 7™, Microsoft® Windows 8™ and Microsoft® Windows 10™
- Ofono for Linux
- RIL Driver for Android

## Approvals

- RED, GCF, FCC, PTCRB, IC, UL, CCC, IFETEL, UKCA, Anatel, JATE, TELEC
- AT&T (Firstnet), Verizon, Telstra, NTT Docomo, KDDI



## 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](https://twitter.com/ThalesIoT) on Twitter