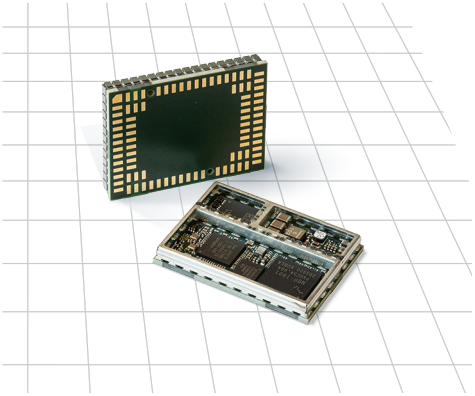
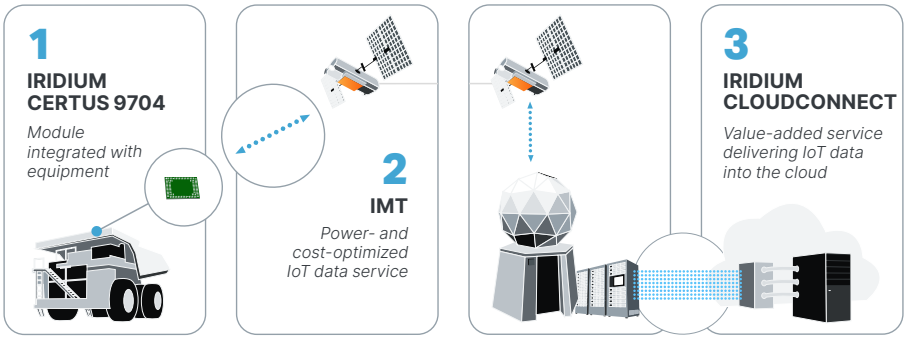
# IRIDIUM CERTUS™ 9704 IOT TRANSCEIVER

Dedicated Hardware for Iridium Messaging Transport® (IMT® )

Built into an ultra-slim module, the latest evolution of IoT integrates with industrial solutions of any scale to deliver cloud-ready data over Iridium's truly global satellite network.



The Iridium Certus 9704 transceiver streamlines fragmented development stages and solves three major challenges holding back scaled IoT projects: hardware design complexity, unreliable network coverage, and poor data orchestration. The new Iridium® transceiver is engineered within a complete IoT ecosystem that bridges hardware, software, connectivity, and data management. Iridium Certus 9704 offers reliable satellite IoT connectivity supported by cloud infrastructure, allowing users to convert data into actionable business intelligence and measurable results.




## ADVANTAGES

- 2-SQUARE-INCH FOOTPRINT FOR EASY INTEGRATION
- LOW POWER SPECS FOR ACTIVE AND IDLE MODES
- DESIGNED TO WORK WITH SMALL-APERTURE ANTENNAS
- MADE TO DELIVER 10+ YEARS OF CONTINUOUS SERVICE
- IDEAL FOR HARD-TO-REACH, REMOTE DEPLOYMENTS
- 100 KB MAX MESSAGE SIZE THROUGH COST-EFFECTIVE IMT SERVICE
- ENABLES MOBILE OR FIXED SOLUTIONS OF ANY SCALE
- GENERATES UNIVERSAL, CLOUD-READY DATA FORMAT

## HARDWARE MADE EASY

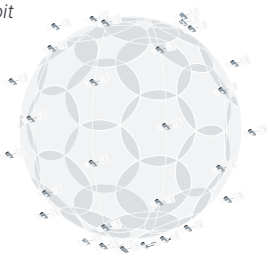
Iridium Certus 9704 packs the power of truly global satellite coverage in a sleek form factor without cables or added parts — just a single component soldered directly onto the developer PCB using Land Grid Array (LGA) technology. A durable surface mount coupled with minimal profile height allows developers to build compact, rugged, and versatile devices powered by the Iridium network.

## ONE NETWORK, ANYWHERE

Iridium Certus 9704 grants access to a satellite network reachable anywhere on Earth, even polar regions. For distributed IoT devices, Iridium Certus 9704 offers a steady connection without the unpredictable costs of complex multi-network deployments. Utilizing 66 Iridium satellites, cross-linked pole to pole, users can avoid roaming issues, critical coverage gaps, and the hidden tolls that network-jumping takes on hardware power efficiency and overall service life.

## THE IRIDIUM NETWORK

*-Interlinked satellite mesh*
*-Low-Earth orbit*
*-Truly global*
*-Low latency*
*-L-band*



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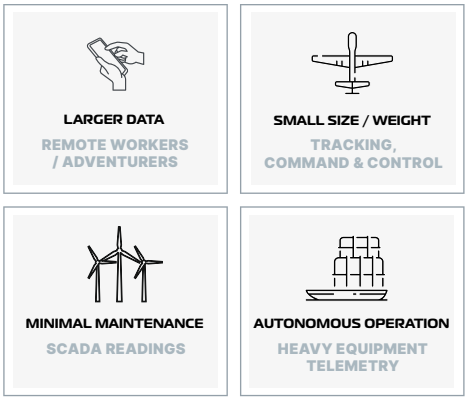
## IMT: THE FUTURE IS NOW

Iridium Certus 9704 exclusively supports IMT — a new format of cloud-native, server-device messaging that optimizes the capabilities of the Iridium network to match increasing demand in industrial IoT. A cutting-edge evolution of Iridium Short Burst Data® (SBD®), IMT replaces proprietary Iridium protocols with industry-standard message constructs (hubs, pub/sub, or queues) and offers more cost-effective payloads for machine-to-machine (M2M) IoT applications. Engineered to reflect the universal trends of industrial IoT and maximize the cloud potential in connected solutions, IMT is centered on advanced hardware - and network-efficient methods for carrying IoT data. The endpoint of the data journey and ensuring successful transfer into the cloud rests on Iridium CloudConnect, a value-added service developed in partnership with Amazon Web Services. Iridium CloudConnect is a free enhancement to IMT for users who want actionable insights and business value.

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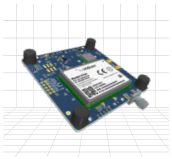
|---|---|---|
| **Mechanical** | | |
| | Dimensions | 31.5 mm X 42.0 mm x 3.9 mm (L x W x H) |
| | Weight | 9.7 g |
| | PCB connection | Standard SMT via Land Grid Array Dx |
| **Power** | | |
| Recomm. normal operating voltage | V_BAT_MAIN (Min/Typ/Max) | 3.5 V / 3.7 V / 4.5 V |
| | V_BAT_PA (Min/Typ/Max) | 3.5 V / 3.7 V / 4.5 V |
| | V_IO (Min/Max) | 1.8 V / 3.3 V |
| Max. normal operating current | V_BAT_MAIN (Max) | 1600 mA |
| | V_BAT_PA (Max) | 7A |
| | V_IO (Max) | 250 mA |
| Average power for idle (over several seconds) | V_BAT_MAIN (Typ) | 40 mW |
| | V_BAT_PA (Typ) | 0 mW |
| Average power for IMT **(over time)** | V_BAT_MAIN (Typ) | 300 mW |
| | V_BAT_PA (Typ) | 600 mW |
| **RF Interfaces** | | |
| Antenna connection (XCVR_RF) | Antenna type | Ceramic patch or helical |
| | Frequency range | 1616-1626.5 MHz |
| | Duplexing method | TDD |
| | Input/Output impedance | 50 Ohm |
| | Multiplexing method | TDMA / FDMA |
| GNSS Passthrough (GNSS_RF_OUT) | GNSS bands | 1559-1610 MHz |
| | GNSS passthrough gain (Min/Typ/Max) | 4 dB / 7 dB / 10 dB |
| | Output impedance | 50 Ohm |
| **Connectivity** | | |
| | Network type | Low-Earth Orbit, L-band |
| | Satellite service | Iridium Messaging Transport |
| | Service type | Connectionless, store-and-forward |
| | Max. message size | 100 kB |
| **Environmental** | | |
| | Operating temperature | -40° to +85° C (incl. self heating) |
| | Storage temperature | -40° to +125° C |
| | MSL | Level 3 |
| **Regulatory** | | |
| | Certifications | FCC, EU/CE, Canada (ISED) |

### IRIDIUM CERTUS 9704: HDK & SDK

*Comprehensive, Arduino-based developer testing environment*



## GET STARTED

For general questions and product details, please contact your Iridium representative or sales@iridium.com.