

# TRASNA

## ADAM-R11

Single-mode LTE Cat 1bis modules

Product summary



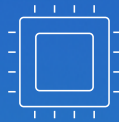
# Upgrade your IoT future with Trasna

Trasna supports over 250 leading brands across 80+ countries with end-to-end IoT connectivity hardware and software solutions for SIM, eSIM, iSIM/SoC, cellular IoT modules, and device management.

Formed through the integration of several established specialist IoT players, Trasna delivers the full cellular IoT value chain from chip to cloud. This foundation gives us unmatched control, efficiency, and innovation across the stack. By partnering with us, clients gain maximum value and a strong competitive edge.



Chip design



(e)SIM



Device mgmt



Cellular IoT modules



## Complete control

Enjoy end-to-end security. Everything starts and finishes with us, so you always have complete visibility and accountability at every stage



## Complete efficiency

Our end-to-end solutions are designed to deliver optimal efficiency at every stage, reducing costs, time, and resources whilst ensuring fast, easy implementation



## Complete innovation

We deliver cutting-edge, scalable technology, future-proofing your business with solutions that drive rapid growth and capitalise on emerging opportunities

# Trasna in numbers



Top  
**03**

**in cellular  
modules**

Excl. China



**20**<sub>bn</sub>

**secure  
connections**

without breach



**250**<sup>+</sup> **clients**  
in 80 countries



**25**<sup>+</sup> **years'**  
in cellular IoT

# ADAM-R11

ADAM-R11 is a compact, cost-optimised LTE Cat 1bis module designed for IoT applications requiring medium-speed data, global deployment, and efficient power usage. With optional embedded eSIM, integrated Wi-Fi scanning, and global or regional variants, it simplifies logistics and supports a wide range of use cases in a space-saving 18 x 18 mm form factor. Ideal for applications such as asset tracking, fleet management, healthcare, and wearables.

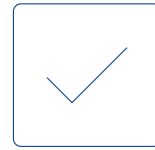


18 × 18 × 2.2 mm

# Benefits

## Flexible deployment

Global and regional variants with key certifications reduce regulatory and supply chain complexity

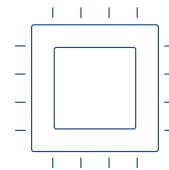


## Low total cost of ownership

Designed for applications that don't require US MNO approvals or permanent US roaming

## eSIM option

Integrated eSIM enables seamless, out-of-the-box connectivity



## Power efficiency

eDRX, PSM, and deep sleep modes extend battery life for long-lasting operation



# Highlights



## Compact and compatible

18 x 18 x 2.2 mm footprint with LGA design, compatible with LEXI form factor for scalable product development



## Global and regional SKUs

Certified for global deployments with key approvals including FCC, ISED, RED, NCC, and Anatel



## Reliable LTE connectivity

Fast 10 Mbps downlink, low latency, and worldwide LTE Cat 1bis coverage



## Power efficiency

Designed with eDRX, PSM, and deep sleep modes to minimize energy use and extend battery life



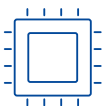
## Security and reliability

Offers secure boot, firmware-over-the-air updates (FOTA), TLS 1.3/DTLS encryption



## Connectivity & integration

Comprehensive I/O (dual UART, USB, 10 GPIOs) and broad protocol support (MQTT, HTTP, FTP) to simplify integration and accelerate time-to-market



## eSIM/RSP option

Optional eSIM and compatibility with the new SGP.32 standard for the IoT Remote SIM Provisioning

# Use cases

- Asset tracking and logistics
- Fleet management and telematics
- Health and wellness monitoring
- Wearables and consumer IoT
- Smart metering and infrastructure
- Safety and emergency response devices



# Product features

|                           |                               | ADAM-R11001D                        | ADAM-R11801D          |
|---------------------------|-------------------------------|-------------------------------------|-----------------------|
| <b>Grade</b>              | Automotive                    |                                     |                       |
|                           | Professional                  |                                     |                       |
|                           | Standard                      | •                                   | •                     |
| <b>Regions</b>            |                               | Global                              | EMEA, APAC, Brazil    |
| <b>Access technology</b>  | LTE FDD bands                 | 1, 2, 3, 4, 5, 7, 8, 12, 20, 28, 66 | 1, 3, 5, 7, 8, 20, 28 |
|                           | LTE TDD bands                 | 34, 38, 39, 40, 41                  |                       |
|                           | Data rate                     | Cat 1                               | Cat 1                 |
| <b>Interfaces</b>         | UART                          | 2                                   | 2                     |
|                           | USB                           | 1                                   | 1                     |
|                           | GPIO                          | 10                                  | 10                    |
| <b>Features</b>           | Secure boot and updates       | •                                   | •                     |
|                           | Internal eSIM                 | o                                   | o                     |
|                           | Remote SIM Provisioning (RSP) | •                                   | •                     |
|                           | Wi-Fi scan                    | •                                   | •                     |
|                           | PSM                           | •                                   | •                     |
|                           | eDRX                          | •                                   | •                     |
|                           | Embedded TCP/IP, UDP/IP       | •                                   | •                     |
|                           | Embedded HTTP, HTTPS          | •                                   | •                     |
|                           | Embedded FTP, FTPS            | •                                   | •                     |
|                           | Embedded TLS, DTLS            | •                                   | •                     |
|                           | Embedded MQTT                 | •                                   | •                     |
|                           | Dual stack IPv4 / IPv6        | •                                   | •                     |
|                           | FW update Over the Air (FOTA) | •                                   | •                     |
|                           | Antenna dynamic tuning        | •                                   | •                     |
| Antenna and SIM detection | •                             | •                                   |                       |

Cat 1= 10 Mbit/s DL, 5 Mbit/s UL

o = Optional

|  |                               |   |
|--|-------------------------------|---|
| <b>Features</b>  | LTE                           | LTE Cat 1bis (10 Mbit/s DL, 5 Mbit/s UL)<br>3GPP Release 14<br>Power saving features: PSM, eDRX, and cDRX |
|  | SMS                           | MT/MO PDU / Text mode<br>SMS over IMS and via SMS-C   |
| <b>Electrical data</b>                                   | Power supply                  | 3.8 V nominal   |
|  | Power consumption             | PSM: 4 $\mu$ A<br>eDRX (81.92s): 0.9 mA   |
| <b>Package</b>   | 133 pin LGA (Land Grid Array) | 18.0 x 18.0 x 2.2 mm  |
| <b>Environmental data,<br/>quality &amp; reliability</b> | Operating temperature         | -40 °C to +85 °C  |
|  | RoHS compliant                | Lead-free   |
|  | Trasna qualification policy   | Qualified as Trasna standard grade products   |
| <b>Certifications and approvals</b>                      | ADAM-R11001D                  | FCC, ISED, RED, NCC, Anatel   |
|  | ADAM-R11801D                  | RED, NCC, Anatel  |
| <b>Support products</b>                                  | EVK-ADAM-R11001D              | Evaluation kit for ADAM-R11001D   |
|  | EVK-ADAM-R11801D              | Evaluation kit for ADAM-R11801D   |
| <b>Product variants</b>                                  | ADAM-R11011D                  | LTE Cat 1bis module with global coverage  |
|  | ADAM-R11801D                  | LTE Cat 1bis module for EMEA, APAC and Brazil   |

# Take the next step

Grow your business with Trasna ADAM-R11.  
Contact your account manager to learn more.

[hello@trasna.io](mailto:hello@trasna.io) | [www.trasna.io](http://www.trasna.io)

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