

Direct to Device

Satellite IoT



Rave Technologies' state-of-the-art Direct to Device satellite solution is ideal for extensive IoT deployments that require compact devices for minimal data transmission. Our cost-effective devices are optimised for long battery life and provide seamless global connectivity, allowing for direct satellite communication without the need for additional field hardware.

Description

The latest 5G narrowband satellite standards (NB-NTN) are revolutionizing IoT data communication. Viasat's new IoT Direct product, utilizing their resilient L-band spectrum provides reliable coverage across most of the planet (excluding far polar regions) ensuring your data flows when needed.

Our Direct to Device solution exploits this technology to build devices with the specific data interface required for your equipment. These devices can be integrated with the physical hardware or as stand-alone units, depending upon the specific requirements of the use case. The need for repeaters, gateways, or local RF engineering are eradicated. Our battery-operated devices are designed to function without solar or wired power sources.

Use Cases

Suitable for adaption to a range of massive IoT applications including:

- Asset Tracking
- Periodic Measurements
- Threshold Alerting
- Simple Remote Control

Features

Two-Way Communication: Messages up to 256 bytes for both monitoring and control use cases.

Ultra Low Power Consumption: Extends battery life and reduces operational costs.

Cost-Effective: Affordable hardware that meets your needs without breaking the bank.

Compact Design: Small form factor ideal for various applications.

L-Band Frequency: Ensures robust and reliable global coverage.

3GPP NB-NTN Standard: Powered by the latest narrowband satellite IoT standards, ensuring superior performance and future-proofing your investment.

Direct to Device

Satellite IoT



Key Capabilities

Enhanced Coverage and Connectivity: Overcome geographical limitations and enjoy continuous connectivity where terrestrial networks can't reach.

Standards-Based Design: Utilises widely available, cost-effective hardware components.

Long Battery Life: Devices are optimized to last up to 10 years on a single battery, thanks to efficient power usage and application-focused design.

Scalability: Connecting the device directly to satellite, Direct to Device provides effortless scalability, simplifies setup and reduces costs.

Secure Data Delivery: Data can be securely exchanged via API, ensuring safe and reliable information exchange integrated into your own specialist systems.

Water Metering and Control

Our first devices provide water meter readings and valve control for water consumers.

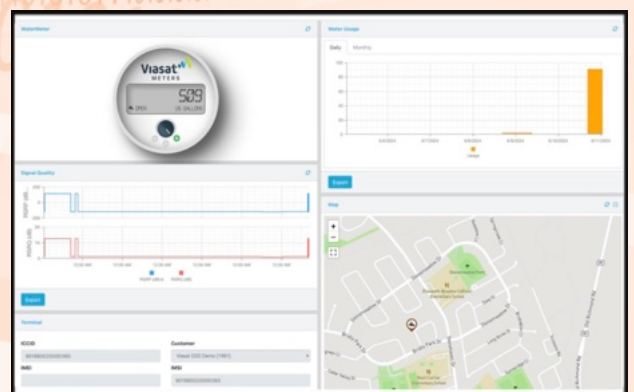
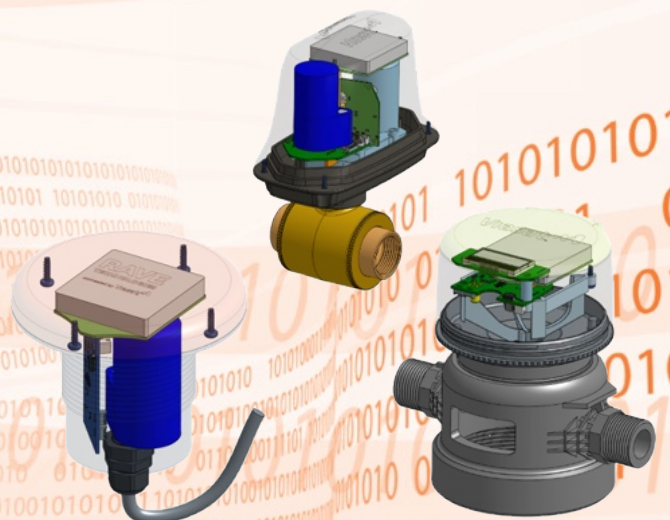
Two satellite communication devices to read the usage from the meter (either integrated into the meter or as a separate positionable unit) and to control the valve.

Remote Terminal Manager:

The user interface is provided by the Remote Terminal Manager application. Alternatively, the data is available via API. The user can monitor:

- Usage
- Valve position
- Signal strength
- Battery level
- Location

As well as control the valve to switch on or isolate the water supply.



More Information

Please contact us at rave-d2d@ravetech.biz

