

## ThorTraffic Mobile

The ThorTraffic Mobile from THORSIS is a small, lightweight and proven rugged module that can be easily retrofitted to any vehicle.

It exchanges data at high speed over long distances and provides efficient response times to several traffic situations. Complying with essential standards, this OBU is prepared for demanding conditions in the field.

## ThorsisTraffic Mobile OBU Specs



### SYSTEM

Operating System: Linux 5.10

Dimensions:

(Box Only): approx. 180 mm x 165 mm x 65 mm

Power Supply: 8-42 V DC

**Power Consumption:** 

maximum 4W

**Environmental Operating Ranges:** -40 °C to +85 °C

**Internal Connectors:** 2x USB, SD Card Slot

### GNSS

Concurrent reception of up to 3 GNSS (GPS, Galileo, GLONASS, BeiDou)

Antenna: 1 SMA Connector

**Sensitivity:** –167 dBm navigation sensitivity

**Update Rate:** up to 10 Hz

### ITS-G5 RADIO

**Antennas:** 1 or 2 with N-Connector

Max Tx Power: +23 dBm (Class C)

**Tx Power Control:** in 0.5 dBm steps

Rx Sensitivity: -97 dBm @ 3 Mbps

Bandwidth: 10 Mhz

**Frequency bands:** 5.850 MHz - 5.925 MHz (Channel 172, 174, 176, 178, 180, 182, 184)

Data Rate: 3-27 Mbps

Antenna Diversity:

CDD for TX MRC for RX

Standards:

ETSI TS 102 792 V1.2.1 EN 302 571 V2.1.1 IEEE 802.11p (IEEE 802.11-2016) ETSI EN 302 663

TH RSIS

ETSI EN 302 663 IEEE 1609.4 - 2016

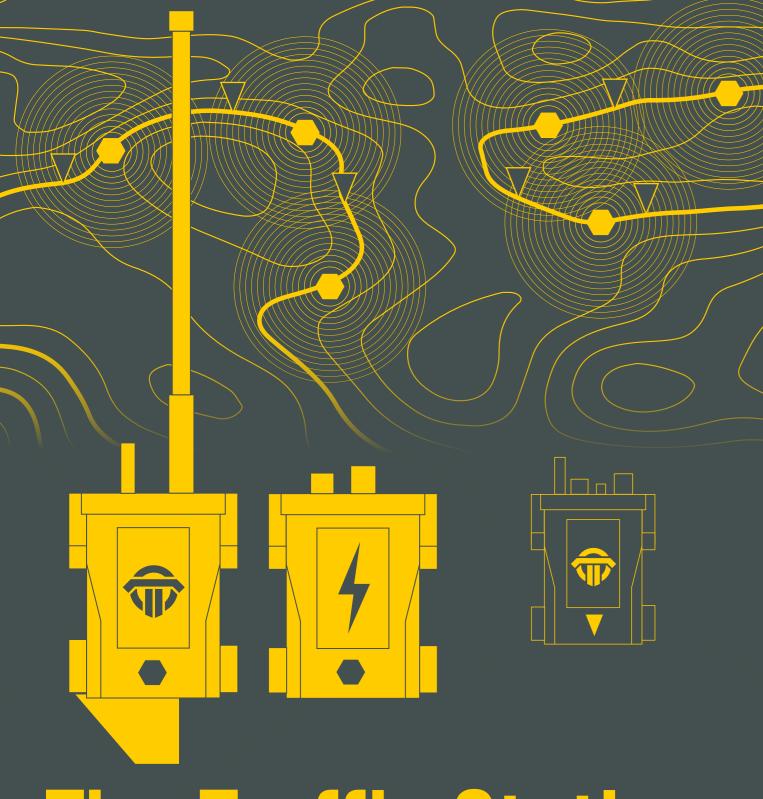
## ThorTraffic

ThorTraffic enables data exchange via ITS-G5 with passing vehicles through resource-efficient reuse and sustainable upgrade of existing traffic infrastructure of street lights in cities.









## ThorTraffic Station

The ThorTraffic Station from Thorsis is a lightweight, robust outdoor unit with integrated connections for up to 2 antennas. The housing complies with IP67 requirements and thus against foreign bodies, touch, dust and heavy splash water.

Designed for use in smart cities, this RSU provides the maximum achievable signal strength.

With a specifically designed low power consumption it is possible to integrate the RSU into existing power networks without installing an additional system. This competitive advantage allows the RSUs to be easily coupled and maintained at traffic lights, street lights and emergency call boxes.



### **SYSTEM**

Operating System: Linux 5.10

Dimensions:

(Box Only): approx. 180 mm x 165 mm x 65 mm

Power Supply: 8-42 V DC

Power Consumption:

maximum 4W (with LTE Option 7W max.)

Internal Connectors: 2x USB, SD Card Slot

**Environmental Operating Ranges:**  $-40\,^{\circ}\text{C}$  to  $+85\,^{\circ}\text{C}$ 

### GNSS

### Concurrent reception of up to 3 GNSS

(GPS, Galileo, GLONASS, BeiDou)

Antenna: Internal

Sensitivity: –167 dBm navigation sensitivity

Update Rate: up to 10 Hz

### ITS-G5 RADIO

**Antennas:** 1 or 2 with N-Connector

Max. Tx Power: +23 dBm (Class C)

Tx Power Control: in 0.5 dBm steps

Rx Sensitivity: -97 dBm @ 3 Mbps

Bandwidth: 10Mhz

Frequency bands: 5.850 MHz - 5.925 MHz (Channel 172, 174, 176, 178, 180, 182, 184)

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### Antenna Diversity:

CDD for TX MRC for RX

### Standards:

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### **DATA FORMATS**

### (LTE/4G):

JSON, DATEX II, MQTT PER-Encoded for lower data volume

### WLAN-IEEE 802.11p: CAM, DEMN

### LTE

Antenna: Internal

### Radio Access Technologie:

LTE CAT M1 and Narrowband (NB1)

Power Class: Class 3 (23 dBm)

### Data Rate

M1 up to 375 kb/s Up Link, 300 kb/s Down Link NB1 up to 62.5 kb/s Up Link, 27.2 kb/s Down Link

Mirco SIM Card Holder

# ThorsisTraffic Station



### **OVERVIEW**

### Cells:

6x Type 21700 with 5000 mAh

### Power Supply:

230V AC

### Power out:

28V DC if Power Supply is connected or 22-26 V if Power Supply is not connected

### Interface:

RS485 for Status query

### Features:

2 Temperature Sensors

Heater for charging in sub-zero temperatures (°C)

