TollFree
TTC:21.63 EUR

OK

SATELLIC SMART ON-BOARD UNIT
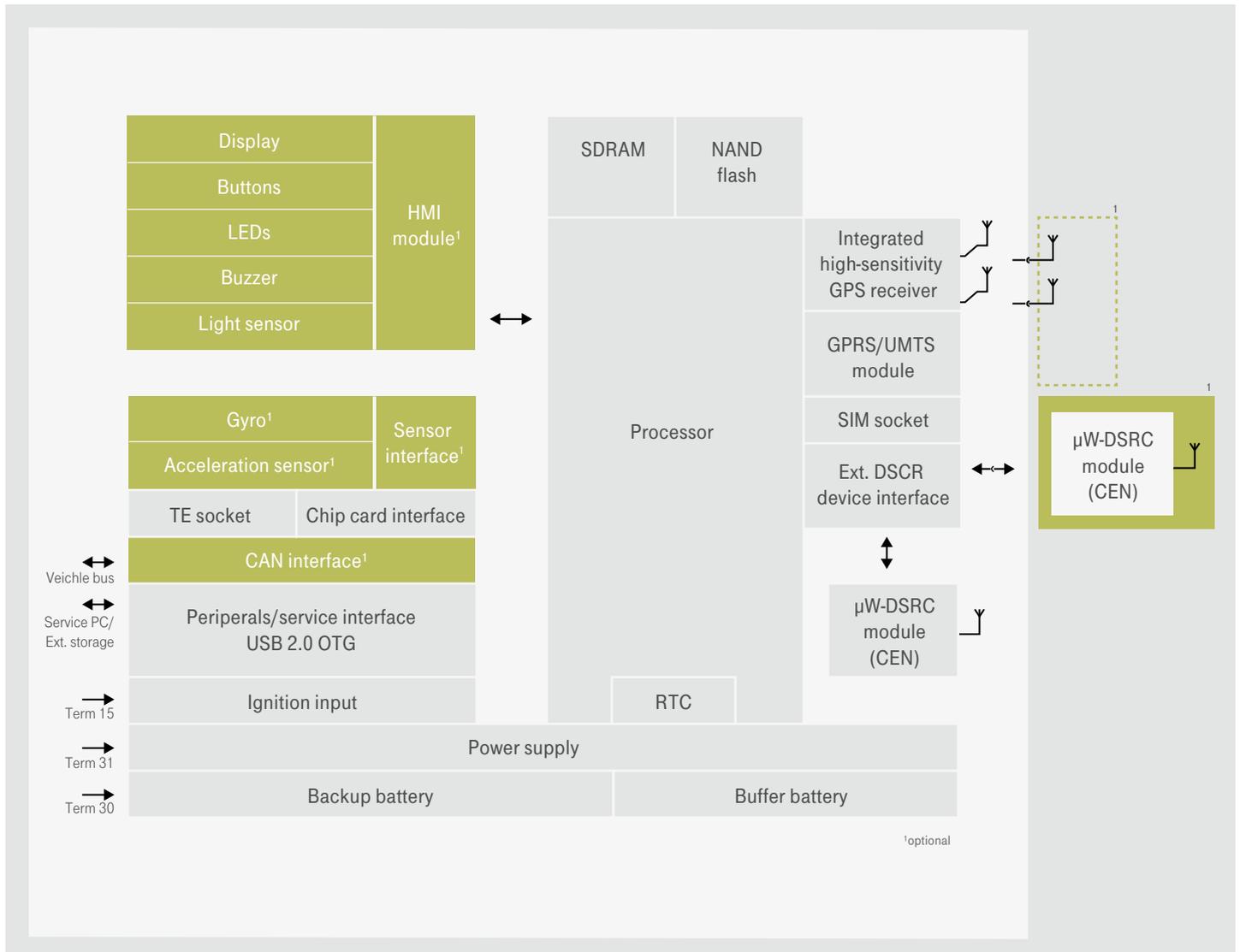
IN-VEHICLE DEVICE FOR ACCURATE TOLL CHARGING

A core component of the Satellic Tolling Platform, the autonomous on-board unit (OBU) plays a key role in the tolling process. The automotive-grade device guarantees accurate detection of toll roads, reliable operation and a high level of protection against fraud or manipulation.

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KEY FEATURES

- High-sensitivity GPS/GNSS receiver (A-GPS enabled)

- DSRC module

- GPRS/UMTS module

- Flash memory

- Central processing unit

- Human-machine interface (HMI)

- External power supply or backup battery

- Internal antennas (GPS, GPRS, DSRC)

- Security: seals, housing switch, integrated encryption

- Additional sensors and external antennas (optional)

OBU HARDWARE PLATFORM

HMI module[1]		Processor	Integrated high-sensitivity GPS receiver
Display		SDRAM / NAND flash	GPRS/UMTS module
Buttons			SIM socket
LEDs			Ext. DSCR device interface
Buzzer			
Light sensor			µW-DSRC module (CEN)

Left column blocks:
- Display
- Buttons
- LEDs
- Buzzer
- Light sensor
- HMI module[1]

- Gyro[1]
- Acceleration sensor[1]
- Sensor interface[1]
- TE socket
- Chip card interface
- CAN interface[1]
- Periperals/service interface USB 2.0 OTG
- Ignition input

Interface labels (left):
- Veichle bus
- Service PC/ Ext. storage
- Term 15
- Term 31
- Term 30

Center/right blocks:
- SDRAM
- NAND flash
- Processor
- Integrated high-sensitivity GPS receiver
- GPRS/UMTS module
- SIM socket
- Ext. DSCR device interface
- RTC
- µW-DSRC module (CEN)
- µW-DSRC module (CEN)

Bottom blocks:
- Power supply
- Backup battery
- Buffer battery

[1]optional

EASY INSTALLATION AND OPERATION

The GPS-only OBU is designed for either temporary or permanent usage, and is easy to install and operate. Occasional users can install the device within a few minutes (by simply connecting the OBU to the cigarette lighter). If the OBU is to be used permanently, it can be installed with a fixed power connection.

HUMAN-MACHINE INTERFACE

The OBU's human-machine interface (HMI) provides a number of control elements to improve usability and user acceptance:

- Two-line LCD display

- Buttons for menu navigation and selection

- LEDs for optical status indication

- Beeper for acoustic signals

STANDARDS ENSURE SAFE INSTALLATION

To ensure the OBU can be safely installed in vehicle interiors, the electronic parts and housing of the device are compliant with various regulations and standards such as EMC (E1, 10R-03 5876, 1999/5/EG), CE 0692, and R&TTF. The OBU also meets automotive standards such as ISO 16750 or ISO 11452. Housing parts are made of fire-resistant materials and are UL certified. All components comply with RoHS (Restriction of Hazardous Substances).

FRAUD PROTECTION AND SECURITY

Special features enable fraud detection and ensure the highest levels of security.

- Road-user data and OBU-related confidential information such as keys and certificates are stored on a highly secure trusted element.

- The housing and sealing make any tampering evident immediately.

- Integrated encryption protects data against manipulation by hackers.

OBU IN USE

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