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**Key features**

- Up to 3 simultaneously sampled radio frequency (RF) reception chains
- Each RF chain can be independently pre-configured to one of the RF bands above
- Pre-configurable bandwidth, bitwidth, sampling rate, intermediate frequency
- Extension to up to 6 RF chains via synchronized parallel operation of two RFFEs

**Application examples**

- Development of software defined radios/receivers (SDR)
- GNSS multi-system signal analysis and comparison
- Analysis of atmospheric effects (iono-/tropospheric irregularities and scintillation, etc.)
- Interference monitoring for protecting critical operations and infrastructures

**Modular GTEC<sup>®</sup> RF Front-End with up to three GNSS Bands**  
GPS | GLONASS | Galileo | BeiDou | QZSS | IRNSS | SBAS

**GTEC**<sup>®</sup>

RFFE

www.teleorbit.eu

**Teleorbit**

The Locating Company



Example for modular RF front-end with housing



RF modules and base unit

#### Performance characteristics

- GNSS signals ▶ catch them all:
  - GPS L1, L2, L2c, L5
  - Galileo E1, E5a, E5b, E5, E6
  - GLONASS G1, G2
  - BeiDou B1, B2, B3
  - QZSS and IRNSS L5
- Bandwidth: up to 68 MHz
- Intermediate frequency: zero IF
- Sampling rate: up to 80 MHz
- Bitwidth: up to 2x8 bit (complex)

#### Technical details

- Dimensions (L/W/H): 188/125/50 mm
- Weight: 0.8kg
- Power supply / gain control via USB or AGC
- Internal TCXO
- Super speed USB 3.0 (up to 1,280 Mbit/s)
- USB driver with application programming interface (API)
- Visualization and recording software included
- Drivers for Windows XP/7, Linux

#### Interfaces

- Active antenna support: maximum 50 mA @ 4.3 VDC
- External reference clock input
- Reference clock output
- Parallel digital data output (optional)

#### Configuration examples

- L5/E5/B2 | 68 MHz BW | 2x8 bit complex
- L1/E1bc | L2/L2C | L5/E5a | 18 MHz BW | 2x4 bit complex

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