# wiGate

# UMTS/HSPA Wireless Gateway

## wiGateCore

The programmable HSPA equipped gateway wiGateCore is core of the product wiGate. On hardware side it offers GPS and acceleration sensor, IO ports, ADC and CAN-Bus. The automotive diagnostic protocols UDS on CAN (ISO15765-3) as well as OBD (ISO15031) are also on board. The well known CANdb-format will also be supported.

## Frontends

All information send by remote hardware are visualized for the user in charts, lists, "hot fields" and maps by wiGatePanel (Windows) or wiPanel (Android). wiGatePanel empowers the user by means of script generators and an IDE to write and modify scripts and administrate them on wiGateCore, which may be hundreds of kilometers away.

## Scripts („Apps")

Which jobs wiGateCore is doing is defined by the user. Write your "apps" in Lua, such as: Executing user defined diagnostic services (get OBD values, reading error memory,...), reading signals (GPS, CAN, ADC, I/O...), supervising, combining and analyzing data and sending all relevant data directly to the PC or mobile phone. Finally load up the Lua scripts to the remote hardware wiGateCore and run it..

| Fahrzeug | | wiGateCore | | Mobilfunk | | Frontends |
|---|---|---|---|---|---|---|
| | UDS/CAN Bus, IO | | HSPA/GPRS | | Internet | |

| UMTS module | 2x ARM946/DSP-32-bit processor 104 MHz. Triband UMTS/HxDPA 2100/1900/850 MHz. Quadband GSM GPRS EDGE 800/900/1800/1900 MHz. |
|---|---|
| GPS module | 50-channel µ-blox positioning engine, fast Time-To-First-Fix (TTFF), horizontal position accuracy 2,5 m (CEP, -130 dBm), velocity accuracy 0,1 m/s |
| CAN bus | HSpeed, 125-1000 kbps, Freescale 32-bit µC. Option: Wakeup on CAN, low standby current |
| Acceleration sensor | 3-axis, 13-bit resolution with ±16 g (4 mg/LSB) |
| microSD card | 2, 8, 16 GB |
| RS232 | RX/TX/RTS/CTS |
| IOs | 2 digital outputs (o.C.) 500 mA, 4 digital inputs, „Kl-15-Input" |
| USB 2.0 | |
| ADC | 10-bit resolution (0 - 18 V) |
| 3 LEDs | mobile service status, software status, user software (scripts) status |
| Software update | over the air |
| UDS on CAN | Automotive communication protocol: UDS (ISO15765-3) and OBD (ISO15031) |
| Voltage | 6 to 36 V DC |
| Temperature | -30 to +75 °C, Option: -40 to +85 °C |
| Connectors | 14-pin MDR connector, 2x FAKRA (code C, D) |
| Dimensions | 75 x 35 x 100 (W H L) |
| Certifications | CE, EN55025, ISO7637-2, ISO16750-2 |