



KT 100 DTG IA/74

"KT 100 GPS BASIC 12V
all in one"

Tiny and compact GPS "all in one" architecture unit with ergonomic and "nice looking" external enclosure, shaped in such a way to make installation easier and quicker. Hardware and application top level performances and embedded native functional blocks combined with full OTA configurability and firmware upgradability make it an outstanding flexible and powerful product. The **wide and complete** set of I/O and range of accessories allow it to match any application need oriented to 12Vdc vehicles with any required performance levels, all this with a **very reduced price to performance ratio**.



PART LIST

- > N.01 Complete module with integrated GPRS phone, GPS receiver, GSM and GPS integrated antennas.
- > N.01 I/O Set of cables
- > User's and installation manuals

MAIN FUNCTIONS

- CEI 79/56 and ECE 97 Directives Approvals.
- R&TTE Full Type Approved.
- SMS, Data and GPRS communication channels.
- Possibility to use a configurable DNS as a destination address
- Call ID no cost communication capability.
- Native "jamming" detection function usable in logical functions to program local real time reaction procedures.
- Location either via GPS or GSM network as a back-up.
- Operational range with internal batteries (typical):
 - > 5 hrs in continuous communication;
 - > 48 hrs in stand-by
- Optimised consumption (programmable)
- Firmware upgradability from remote (OTA)
- Fully teleconfigurable logical functions and procedures, making use of I/O and system resources.
- Availability of embedded macro functions for outputs management to optimise performances and security
- Extended logical functions capability (32) also for autotesting configurations with immediate activation and easy implementation of complex procedures for any kind of application
- Optional low cost I/O external expansion (6 analog inputs supported)
- Flexible management of communication channels.
- Dynamic and programmable management of a wide capacity memory (over 10.000 records, including I/O and logical statuses)
- Availability of trip data into the positioning record (driven Km) as an absolute or a relative value
- Teleactivation of on-board actuators from remote CBS.
- Built-in "Black box" functions with programmable recording strategies and air time costs optimisation.
- Teleprogrammable Privacy functions.
- Wide number of teleprogrammable Pin Codes (passwords), with single driver assignment capability.
- Multiple area fencing capability, fully programmable.
- Automatic route and area control, fully programmable separately.
- Work flow, break and messaging for logistics.
- Programmable current position displacement control.
- Driven distance measurement capability.
- Driven time measurement capability, fully programmable.
- Average and maximum speed reports, referred to a programmable predefined route.
- Possibility to send notifications of speed limit exceeding per type of road/area provided that the specific roads/areas have been previously vectorised and stored into the unit memory

TECHNICAL CHARACTERISTICS

- Dimensions: L136 W 98 H16 mm
- External power supply: **12 Vdc**
- Consumptions:
 - > Operation mode: < 140 mA (GPS E GSM powered-on)
 - > Idle mode: < 7 mA (GPS off e GSM on network not connected)
 - > Sleep mode: up to < 1 mA (GPS e GSM off, sectioned pull up and keeping logic activated)
- Integrated phone:
 - > GSM /GPRS quad band (850, 900, 1800,1900)
 - > Type 2 G
 - > Power Class : 4 for GSM / EGSM bands
 - > Power Class : 1 for DCS / PCS bands
 - > Data communication: 9600 baud and/or by SMS
 - > Sensitivity: -107dBm all bands
 - > GPRS class 10 - protocol TCP/IP or UDP (optional)
 - > Integrated GSM quad band antenna,1 dBi Gain, 50 ohm Impedance
- Integrated GPS receiver:
 - > High-speed acquisition 48 channels
 - > Time to acquisition:
 - Cold start = 35 seconds
 - Warm start = 27 seconds
 - Hot start = 1 second
 - Navigation Update frequency = 5 Hz
 - Positional accuracy (CEP50) = 1,5 m
 - > Protocol: NMEA 0183 standard
 - > Sensitivity: -162 dBm
 - > Assistable
 - > Integrated GPS Passive patch antenna with LNA, 3 dBic Gain
- Inputs:> 1 digital input, with positive activation(+15), protected as per ISO 7637
 - > 4 programmable inputs to handle analog signals (**0-30V**), digital signals with variable threshold, **programmable from remote with pull-up selection**, protected as per ISO 7637
- Outputs: > 3 digital output MOSFET "open drain" **300mA**
 - > auto short-circuit protected
 - > external relays (optional) for power management (engine block, etc.)
- Serial ports:
 - > Coded KT Code (KFT proprietary protocol), with remote notification of attach
- SIM card reader: > Integrated
 - > Sim chip compatible
- Integrated Battery pack, LiPo, $\geq 1050\text{mAh}$ /3.7V with protection temperature in recharge
- Firmware: Updatable **OTA** in GSM/GPRS connection and in local via serial port
- Temperature range: -40 \pm +85 C°
- 16 Bit Micro processor: Freescale HCS12 family
 - > Flash = 512 KB
 - > RAM = 32 KB
- Testing: by 2 LED on board or by external display (optional)
 - > Green LED and +15 for GSM status - network status and communication mode
 - > Green LED verifies IN2 input status
 - > Red LED and +15 for GPS status - acquisition and position
 - > Red LED verifies IN1 input status

HOW TO ORDER

KT 100 DTG IA/74: KT 100 GPS BASIC 12V all in one" Version 7.4

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