

**VEHICLE TRACKING AND SECURITY SYSTEM
PERGO F60 TECHNICAL SPECIFICATIONS**

HARDWARE		
GPS Specifications		
	GPS Chipset	U-BLOX5
	Antenna	Internal (Passive Antenna)
	Cold Start	29 seconds
	Warm Start	29 seconds
	Hot Start	1 second
	GPS Sensitivity	-160 dBm
	SuperSense Indoor GPS	Yes
	Positioning System	GPSL1, GALILEO1, SBAS, WAAS, EGNOS, MSAS, GGAN
	Number of GPS Receiver Channels	50
	Assist-GPS	Available
GSM Modem Specifications		
	GSM Protocol	Class 10
	GSM Modem	Quart Band 800/900/1800/1900
	Antenna	Internal
	SIM Card	Internal
External Components of Hardware		
	Number of Simultaneous Hardware Supported	All additional hardware can be serially connected at the same time.
	In-vehicle motion detection sensor (PIR)	Available (Optional)
	Temperature sensor	Available (Optional)
	Digital Camera Support	Available (Optional)
	Proximity Card Reader Support	Available (Optional)
	Multiple Input/Output Support	Available (Optional)
	LCD Message Unit and Keypad	Available (Optional)
Communication		
	GPRS	Available
	SMS	Available
	DataCall	Not supported
	Radio	N/A
	Satellite	N/A
Positioning		
	GPS positioning	Available
	A-GPS Support	Available
	GSM Cell Information Sending	Available
	MPS (Mobile Positioning System)	N/A
Casing		
	Dimensions	72 x 46 x 17 mm (55 cubic cm)
	Weight	42 grams (excluding internal Li-ion battery)
	Casing standard	IP44
Other Specifications		
	Operating Voltage	6 V DC – 35 V DC
	Operating Temperature	-30°C ... +70°C (excluding battery)
	Battery Operating Temperature (Li-Ion)	-20°C ... +60°C
	Power Consumption Under Normal Conditions	180 mW
	Power Consumption During	1W

Reception/Sending (Average)	
Power Consumption in Sleep Mode	Between 0.1 mW and 3 mW depending on the power supply and shutdown status
Automatic wake-up from sleep mode	Available
Automatic start-up	Available Fixed: Starts/shuts down according to vehicle's ignition information. Mobile: It can be started/shut down using the button. If not shut down, it automatically goes into sleep mode during immobility.
GPRS connection time	5-25 seconds
Hidden installation inside the vehicle	Yes
Stopping the vehicle remotely	Available. Requires optional RELAY connection. Vehicle can be stopped by SMS message to be sent from mobile phones of authorized persons or using the desktop application.
Number of external connectors	1 (Power, Ignition Switch, RS232, Emergency, RELAY, Fuel/Temperature)
Color classification in connectors	Single connector is used for all connections.
Visual Status Notification	LEDs in 4 different colors (Charge, Power, GPS, GSM)
Microphone	Internal
Internal Battery	Li-ion
Chargeability	Available
Offline Position Recording	Available – Capacity to store 100.000 position data
External Emergency Connection Port	Available
Voice Call	One-sided / can be started and ended automatically and by the Center.
Firmware Updateable over GPRS	Available – Automatic version check and update by the Center
Reading and changing operating settings over GPRS	Available
Position data compression	Available – Total 15 bytes of data sent includes latitude, longitude, speed, direction, height, number of satellites, position accuracy and distance information.
Minimum position transfer interval	1 second
Foreign operator connection control	N/A (can be set from the operator)
Message send/receive	Available. (LCD Message module required)
Installation under the vehicle using magnets	Available.
Certification by Telecommunications Agency	GSM and GPS Engine are certified by Telecommunications Agency.
Communication with the Center	Over TCP/IP - TCP Socket
Secondary connection support	Available. If no connection is established with the Center over defined primary GPRS connection, secondary GPRS connection is used for communication.
Operating without connection to Center	Available. It does not transfer position data continuously. It delivers to mobile phone via SMS only when requested. It automatically sends SMS messages in alarms and violations.
3D axis sensor	Available
Guarantee	2-year Guarantee
Manufactured in	Turkey

Alarms Generated		
	Emergency Alarm	Available
	Notifying the Center when external power supply is disconnected or reconnected	Available
	Notifying the Center in case of any change in vehicle's geographical coordinates when ignition switch is turned off (towing of vehicle by another vehicle)	Available
	Notifying the Center in unauthorized usage. (Alarm is not generated when it is called using the defined mobile phone.) (E-PARK)	Available (30 phone numbers can be defined) If prevention of vehicle start is desired, RELAY connection is required.
	Motion detection inside the vehicle in E-PARK	Available (Optional PIR sensor)
Restriction Controls		
	Distance Calculation	Available
	Speed Limit Control	Available
	Idle Running Time Calculation	Available
	Sudden acceleration and deceleration	Available
	Geographic Coordinate Arrival	Available (200)
	Sudden fall in fuel level	Available (requires connection of related cable)
	Change in magnetic sensor value	Available (requires connection of related cable. It can be used to control vehicle's hood or damper).