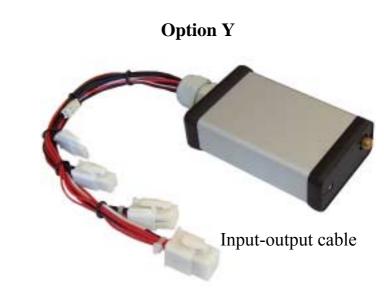
POINTER – GPS/GSM/GPRS DEVICE

Option X



DB25 input-output connector



SPECIFICATION

Boxing

Dimensitions: $80 \ge 55 \ge 23 \text{ mm}$, Weight (built-in NiCd battery included): Opt. X – 170 g, Opt. Y – 190 g, Dust proof case (option Y) Operation temperature range - minus 30 = 1000 mm + 65 C

Power supply

Supply voltage 7 ... 25 VDC.
Battery - 600 mAh SAFT NiCd VT accepts a permanent charge for a minimum of 4 years Current consumption (@ 12 VDC):
- 60 mA @ GPS - ON; GSM - call waiting; battery charge - ON;
- 120 mA @ GPS - ON; GSM - voice call or CSD; battery charge - ON.

Inputs

Two digital inputs (active low and active high). Debounce time from $0 ext{ s to } 2 ext{ min.}$

Two analog inputs. Input voltage range 0 ... 15 V. Two programmable thresholds for each inputs. Debounce time from 0 s to 24 min.

Internal inputs: NiCd battery charge current, NiCd battery discharge voltage, power supply breaks.

Speed measurement using GPS. Two programmable thresholds as in analog inputs

Outputs

4 high end outputs.
Permanent output current – up to 1,4 A. Short circuit protection.
Programmable parameters: passive state (On or Off), initial state (On or Off), active state duration (1 ... 255 s, permanently), mode (static, flash, GSM signal strenght indicator, GSM transmitting, timer period, log).

Voice channel

Electret microphone input. 8 Ohm speaker 1 W output.

Interfaces

The first RS232 for programming, second RS232 - NMEA for external data logger or navigation equipment.

Built-in log memory

4 megabits Logging rate 1 s ... 24 h. Adaptive storage period option.

Firmware

Flexible configuration of alarm programs (logic trigger). Command acception via SMS, DTMF, CSD, GPRS. Alarms transmitting using SMS, Ring, DTMF, CSD, GPRS. 4 programmable timers 1 s to 24 h for logging and data transmitting.

Programming

Several program levels:

1) Firmware upgrade using GSMConfig software;

2) Programming of modes of operation using GSMConfig software;

3) Thresholds, delays, alarm programms, commands, messages and telephone numbers programming using GSMConfig software;

4) End user can program telephone numbers and SMS messages in SIM card

GPS receiver

ORCAM GPS20 Xtrac, 12 channels. 3 V active antenna required.

GSM module

Enfora Enabler -IIG, Sensitivity – 106 dBm; Output power 850 and 900 Mhz – Class 4 (2 Br), 1800 and 1900 Mhz – Class 1 (1 Br) SIM holder – 3 V

Computer software

GSM Config software for device configuration programming; GPS Bridge software for remote monitoring and control; Bluetooth and IrDA support Third party CD-ROM based and internet based Map software support.