GPS monitor

ACQUIRE GPS DATA IN STANDARD DIGITAL FORMATS

The GPS Monitor has been designed to allow coordinate monitoring in Machine-To-Machine applications.

FEATURES
- High RF sensitivity.
- 48 channels architecture.
- Output options: SDI-12, MODBUS RTU, NMEA0183.
- Multi-Constellation option: GPS + Glonass + Galileo + QZSS

APPLICATIONS
- GPS data for your PC, data logger or PLC.
- Vehicle tracking.

SPECIFICATIONS
- Autonomous positional error: < 2.5 m.
- Time to first fix:
  - Cold start < 35 s. Hot start < 1 s.
- Fix LED indicator.
- Passive and Active antenna support.
- Digital SDI-12, v1.3 compatibility.
- MODBUS RTU compatibility
- NMEA0183 compatibility.
- Passive or active antenna compatibility.
- Active antenna included.
- Operation voltage: 5...30 Volts DC
- Current consumption: 35-70 mA, depending on antenna.
- Operation temperature: - 30 ~ +75 °C
- Dimensions: Height=26 mm, Depth=125 mm, Width=117 mm

SDI-12 commands
Below, **a** is the SDI-12 NODE address.
INFO REQUEST:
aI?
ANSWER:
aSYMMETRON GPS-SDI12 v1.0 SN=.......

NODE address REQUEST:
?!
ANSWER:
a

NODE address CHANGE COMMAND:
aAn!
WHERE n= 0-9, A-Z, a-z

VALUE REQUEST:
aR0!
ANSWER:
a+DATE+TIME+LATITUDE+LONGITUDE
+SPEED+AZIMUTH+ALTITUDE
+DOP+FIX<CR><LF>

aR1!
ANSWER:
a+DATE+TIME+LATITUDE+LONGITUDE+
DOP+FIX<CR><LF>

aR2!
ANSWER:
a+SPEED+AZIMUTH+ALTITUDE
+FIX<CR><LF>

WHERE:
DATE in DDMMYY format
TIME in HHMMSS format
LATITUDE,LONGITUDE in decimal degrees
AZIMUTH in degrees, ALTITUDE in meters
SPEED in knots

DOP in decimal (Horiz. Dilution of Precision):
< 1	Ideal
1-2	Excellent
2-5	Good
5-10	Moderate
10-20	Fair
>20	Poor

FIX:
0	no fix
1	GPS fix
2	Differential GPS fix

ORDER CODES:

GPS monitor SDI-12: 002.000.0246

GPS monitor MODBUS: 002.000.0247

GPS monitor NMEA: 002.000.0248