ED Service-Center

PROCESS MODULES

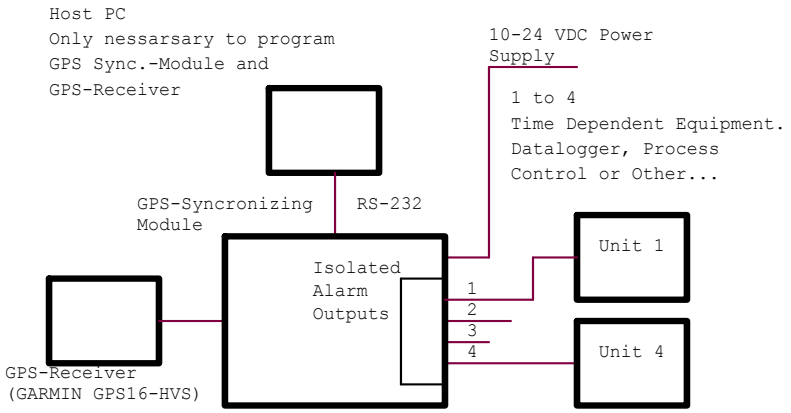
ED-410 Quad UTC-Timer

FEATURES

- Four precise individual RTC (Real Time Clock) Alarm Outputs. All Isolated Transistor Outputs.
- Optimised for use with the GARMIN GPS 16 HVS © for precise synchronization to the UTC (Coordinated Universal Time) Format available from the Global Position System.
- Wide Supply Range: 10-24 VDC.
- Text Instruction Set for easy set-up by PC.
- Programmable "Sleep"-mode to reduce power consumption.
- Special "Monitor"-Mode for Fully Transparent Data connection to a GPS-Module.
- Special "Force"-Mode for Test and Service.
- Easy connection and mounting.
- DIN-Rail mounting bracket.

APPLICATIONS

- Time Critical Measuring Systems or Process Control.
- Precise Equipment On/Off-Control
- Synchronisation of Multi-art Systems separated by geographical distance or difficult Accessibility.



TECHNICAL DESCRIPTION:

The ED-410 Quad UTC-Timer are designed for use in applications where a synchronizing to a precise and "True" Time are needed.

The Module is equipped with an On-Board RTC and a RS232 Interface to a PC and an optional GPS-Receiver.
The RJ45 Connector, in the Front of the Module, provides easy connection to a GPS. (GARMIN GPS 16 HVS © is recommended)

The Module reads the UTC-Time from the optional GPS and adjusts it own internal RTC to UTC-Time. Four different Alarm On and Alarm Off–Schedules can be set. This allows the user to set four independent schedules for the daily Alarms.

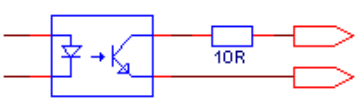
The Module has four programmable daily Alarm Outputs. Each Alarm Output has a Bipolar Transistor Output. This allows the user to interface different types of equipment without the risk of mixing polarity and creating current-loop interferes.

ED Service-Center, Gl. Darupvej 5 B, DK-4000 Roskilde, Denmark • Phone: +45 4636 1515 • Fax: +45 4637 3906 • E-mail: admin@edsc.dk

TECHNICAL SPECIFICATIONS FOR ED-410.

Output Signal :

Output circuitry for all Alarm Outputs.



Uforward	26VDC
Imax:	50mA.

Input Signal :

PC: ASCII, 8 bit, 1 Stop Bit, No Parity.
(Default Baudrate: 19200 Kbit)

PC: NMEA 0183 ASCII
(Default Baudrate: 9600 Kbit)

Power Supply :

9-24 VDC

Min.	15 mA.	(Sleep. No Alarms set)
Typ.	25 mA.	(No Alarms set)
Max.	150 mA.	(All Alarms set)

Operating Temperature :

0 to +60°C

Electrical Connections (Connector)

Terminal 1:	Alarm 1. Open Emitter
Terminal 2:	Alarm 1. Open Collector
Terminal 3:	Alarm 2. Open Emitter
Terminal 4:	Alarm 2. Open Collector
Terminal 5:	Alarm 3. Open Emitter
Terminal 6:	Alarm 3. Open Collector
Terminal 7:	Alarm 4. Open Emitter
Terminal 8:	Alarm 4. Open Collector
Terminal 9:	PC Common (RS232)
Terminal 10:	PC TX (RS232)
Terminal 11:	PC RX (RS232)
Terminal 12:	NC
Terminal 13:	NC
Terminal 14:	NC
Terminal 15:	10-24VDC
Terminal 16:	Common

Electrical Connections (Front RJ-45)

Pin 1:	Power Out
Pin 2:	Common
Pin 3:	Remote On/Off
Pin 4:	GPS TX.
Pin 5:	GPS RX.
Pin 6:	PPS In.
Pin 7:	NC.
Pin 8:	NC.

Front LED's:

Power (Red)	Status (Green)	Mode
Off	*Off*	*No Power*
Short Flash	*Short Flash*	*Sleep*
On	*Off*	*No Signal*
On	*Short Flash*	*GPS On and Ok*
Flash	*Flash*	*Error*
On	*Short Turn Off*	*Monitor*
On	*On*	*Force*

Mechanical Specifications :

Height	100 mm.
Width	22 mm.
Depth	115 mm.
Weight	125 g.

EU Declaration of Conformity :

EN61000-6-3 Emission.
EN61000-6-2 Immunity.

Warranty :

One Year against faulty materials or workmanship.

Maintenance

None.

Serial no.:_____ **Options:**_____

Date:_____ **Sign:**_____