PC104 GPS Module

Precision time source option

The PC104 GPS Transceiver module is an option that can be used with any of the SAGE family of Smart Remote Terminal units. The GPS module allows these units to utilize the high accuracy of GPS for time, which allows for system wide time stamp accuracy up to 1 milli-second.

The SAGE Smart RTU's have long had the ability to use precision timing at the substation level, providing up to 1msec accuracy to Sequence of Event (SOE) data. However, synchronizing time from station to station was typically a function of the protocol and protocols performed this synchronization by sending time through the communications cloud. Since there is typically a greater than 1 msec uncertainty in the determination of when the time is sent and when it is received by the RTU, system wide time synchronization requires a local, accurate and synchronized time source. Often an external clock or IRIG-B signal provides this time.

An external clock can be expensive and requires space, power and separate configuration. The PC104 GPS Transceiver Module is easy to add to any unit. Simply plug it into the PC104 bus on the existing unit. It is added in the same way that the CPU or Serial Communication Expansion module is added to the PC104 stack. Once the card is added, all that remains is to connect the GPS antenna to the card and configure the RTU to use GPS as the primary time source. Configuration is easy to perform with Schneider's user-friendly config@web interface.

Specification Summary:

- PC/104 Bus compatible
- 8 Ch continuous tracking receiver
- Accuracy – 100 nano-seconds
- -40 to +85°C operation
- Relative Humidity - <95%(non-condensing)
- Power +5v +/-5%, 0.3A
- Dimensions – 3.775"x3.550"
- SMB antenna connector

To place an order: Contact your local Schneider Electric RTU Representative or contact us directly:

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