We look closer!

Elsys TraNET® PPC
High Speed Data Acquisition Recorder

The ruggedized portable Data Acquisition solution suitable for harsh environments and mission critical applications

- Turnkey Data Acquisition System
- Up to 24-Channels in one Portable Industrial Computer
- Up to 240 MS/s @ 14-bit Resolution
- Up to 60 MS/s @ 16-bit Resolution
The portable Elsys Transient Data Acquisition Recorder TraNET PPC is a high-precision instrument suitable for harsh environments and mission critical applications. It is a very compact, all in one data acquisition solution with a high channel density. The TraNET PPC was specifically designed for flexible portable usage to capture multiple channels simultaneously in applications such as ballistics, explosive tests or acoustic emission. There are a variety of data acquisition modes available to address specific requirements. The data streaming capability allows acquiring a continuous data stream to disk. In the unique Event Controlled Recording mode (ECR), blocks of data can be captured independently per channel or with associated channels if needed. Adjacent blocks may be overlapping to assure that no relevant information is missing. This mode is especially useful for monitoring and troubleshooting applications. The advanced trigger mode can be configured for each channel separately and linked in either OR or AND logic. The combination of data acquisition modes with smart trigger logic, extended by a large recording window at fast sample rates make the TraNET PPC a very powerful data recording instrument.

Key Capabilities

- Portable turnkey DAQ System
- Powerful TranAX 3 application software
- Up to 24-channels SE, 12-channels differential in one system
- Up to 240 MS/s sample rate
- 14-bit and 16-bit vertical resolution
- Up to 128 MS memory per channel
- High-precision typ. 0.03% of FSR
- Continuous data recording
- Multiblock data acquisition mode with up to 16’000 blocks
- Unique Event Controlled Recording (ECR) with block overlapping for real zero dead-time
- Advanced trigger for debugging
- TranAX with more than 50 scalar functions and built in Formula Editor with more than 60 math. functions for advanced waveform analysis
- Autosequence-macro’s for easy to set up, autom. measurements
- IVI-Driver with sample programs for C++/C#, VB and LabView
- Device drivers for Windows® and Linux
- Processor: Intel Core 2 Duo
- LCD Size: 17"
- 1x500GB SATA HDD, 2GB DDR2 RAM

After a successful data acquisition the data is visualized in various waveform graphs with unlimited zoom capabilities. Cursors and scalar functions are built in to make measurements like RMS and Peak-to-Peak on one trace or Phase and Power Factor on a pair of traces possible. There is an integrated Formula Editor that offers math, math on math on an unlimited number of math channels to further analyze acquired data. TraNET PPC can be synchronized with other Elsys TraNET instruments in order to build large scale systems.

TraNET® PPC Standard Models

<table>
<thead>
<tr>
<th>Model Base Unit</th>
<th>Model Extension 1)</th>
<th># of Channels</th>
<th>Max. Sample Rate/ch [MS/s]</th>
<th>ADC Resolution</th>
<th>Memory [MS/ch]</th>
</tr>
</thead>
<tbody>
<tr>
<td>TraNET PPC 8-ch</td>
<td>-2x4S/ff/bb</td>
<td>8 SE, 4 Diff</td>
<td>2</td>
<td>14-bit</td>
<td>16 MS</td>
</tr>
<tr>
<td></td>
<td>-1x4D/ff/bb</td>
<td></td>
<td>10</td>
<td></td>
<td>64 MS</td>
</tr>
<tr>
<td>TraNET PPC 16-ch</td>
<td>-4x4S/ff/bb</td>
<td>16 SE, 8 Diff</td>
<td>20</td>
<td>16-bit</td>
<td>32 MS 1)</td>
</tr>
<tr>
<td></td>
<td>-2x4D/ff/bb</td>
<td></td>
<td>40</td>
<td></td>
<td>64 MS</td>
</tr>
<tr>
<td></td>
<td>-2x4D/ff/bb</td>
<td></td>
<td>80</td>
<td></td>
<td>128 MS 2)</td>
</tr>
<tr>
<td>TraNET PPC 24-ch</td>
<td>-6x4S/ff/bb</td>
<td>24 SE, 12 Diff</td>
<td>120</td>
<td>16-bit</td>
<td>32 MS 1)</td>
</tr>
<tr>
<td></td>
<td>-3x4D/ff/bb</td>
<td></td>
<td>240</td>
<td></td>
<td>64 MS</td>
</tr>
</tbody>
</table>

1) Replace "ff" with Max. Sample Rate and "bb" with ADC Resolution. Example: TraNET PPC-24-6x4S/40/16 -> 24-ch SE, 40 MS/s, 16-bit
2) TPCX with sample rates 120 MS/s, 240 MS/s or TPCE cards only