

Sub-Nanoseconds Time Measurement Systems: USB2.0-TDC Series

GmbH

| Device | No. of GPX Chips | Input Chanels | Operation Mode (TDC Chip) | Readout Rate (Intern) | Data Format* | Transfer Rate (USB 2.0) | PC Readout |
|-------------------------|---------------------|--|--|-----------------------|---|--|-------------------------------------|
| Dual Channel USB2.0-TDC | 1 | 2 Stop (diff. PECL) 1 Start (LVTTL) 2x BNC Terminals for measurement control Input/ Output (TTL) | - R Mode/ 27 ps time bin - G Mode/ 40 ps time bin | 40 MHź | - Raw Data - FPGA pre-calculated Data (custom specific programming) | > 25 MByte/ s guaranteed (max. 30 MByte/ s) | Windows DLL LabVIEW VI Interface |
| Quad Channel USB2.0-TDC | 2 | 4 Stop (diff. PECL) 1 Start (LVTTL) 2x BNC Terminals for measurement control Input/ Output (TTL) | - R Mode/ 27 ps time bin - G Mode/ 40 ps time bin | 80 MHz | - Raw Data - FPGA pre-calculated Data (custom specific programming) | > 25 MByte/ s guaranteed (max. 30 MByte/ s) | Windows DLL LabVIEW VI Interface |
| USB2.0-TDC | 1 | 8 Stop (LVTTL) 1 Start (LVTTL) 2x BNC Terminals for measurement control Input/ Output (TTL) | I Mode/ 82 ps time bin | 40 MHz | - Raw Data - FPGA pre-calculated Data (custom specific programming) | > 25 MByte/ s guaranteed (max. 30 MByte/ s) | Windows DLL LabVIEW VI Interface |
| Double USB2.0-TDC | 2 | 16 Stop (LVTTL) 2 Start (LVTTL) 2x BNC Terminals for measurement control Input/ Output (TTL) | I Mode/ 82 ps time bin | 80 MHz | - Raw Data - FPGA pre-calculated Data (custom specific programming) | > 25 MByte/ s guaranteed (max. 30 MByte/ s) | Windows DLL LabVIEW VI Interface |

^{*}Surface Concept offers a custom specific FPGA programming for the pre-calculation of data to increase the effective transfer rate.