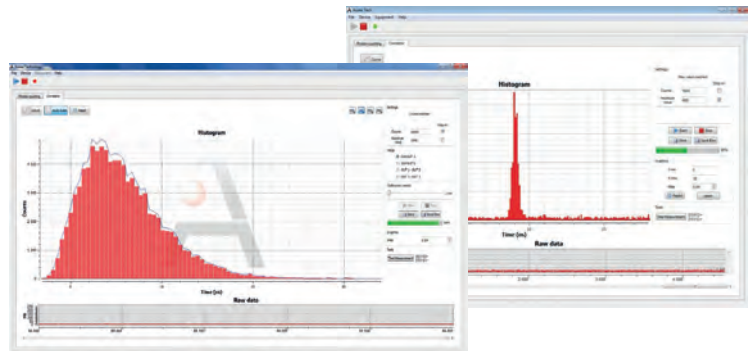


CHRONOXEA

Time Correlation module

4-Channels TCSPC



The CHRONOXEA is a stand-alone Time Correlated Single Photon Counting (TCSPC) module. It features 1 start channel and 4 independent stop channels to perform time correlated measurements with a resolution of 13 ps on measurement range up to 1 second.

In addition, the CHRONOXEA offers a PC connection via its USB interface. Its ergonomic Graphical User Interface allows the user to manage the settings and display the measured data. Moreover, an API based on DLL libraries as well as examples for the most well-known programming languages, such as LabVIEW and C++ are also provided.

Very well-designed, the CHRONOXEA is fully compatible with all commercial single photon avalanche photodiode detectors (SPAD) modules. The modern interface and the flexibility of the CHRONOXEA makes it your essential TCSPC instrument for any time-correlated measurements.

Features

- 13 ps time resolution
- High synchronization rate
- 1 start channel
- 4 independent stop channels
- High transfer rate
- Time-Tagging
- USB interface
- DLL Libraries & examples : Python, LabVIEW, C++

Applications

- TCSPC measurements
- Lifetime measurements
- FLIM microscopy
- Coincidence measurements
- Geiger-mode LIDAR
- Optical fiber sensing

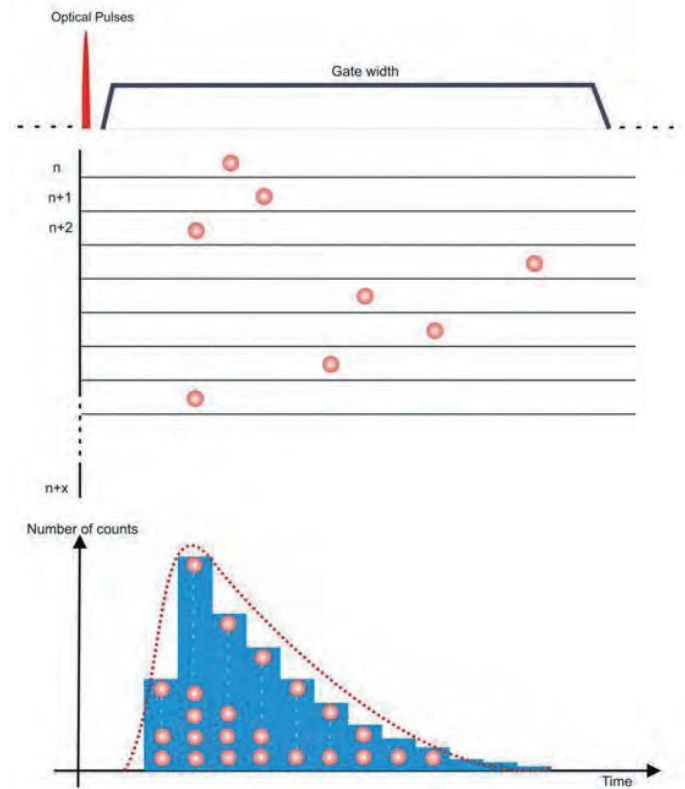
Options

- NIM signals

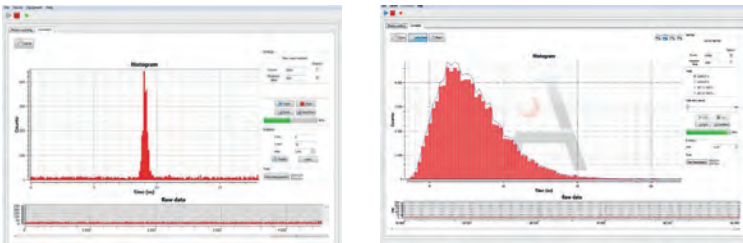
TECHNICAL SPECIFICATIONS

Time Correlation	
Start channel	1 channel
Stop channels	4 independent stop channels
Bin Width	13 ps
Measurement range	From 0 up to 1 sec
Data transfer rate	1 x 10 ⁶ correlations/channel/sec
Max sync. rate (Start)	4 MHz
Max sync. rate (Stop) :	
- Continuous mode	4 MHz/stop channel
- Burst mode*	200 MHz/stop channel
Min gate width input	4 ns
Data display	Graphical User Interface Histograms & curves Raw data & DLL libraries available
Input/Output - Mechanical - Environmental	
Computer Connection	Mini USB 2.0 type B
Sync (IN) - Start	SMA female type connector (LVTTTL) - 50 Ω
Events inputs (IN) - Stops	SMA female type connector (LVTTTL) - 50 Ω
Power consumption	< 6 W
Dimension (LxWxH)	160 x 165 x 52 mm ³
Weight	< 1 kg
Operating temperature	+ 10°C to + 30°C

*Burst mode : burst of 15 successive events



Time histogram building representation



The provided user-friendly Graphical User Interface is compatible with all AUREA Technology's instrument. The DLL libraries compatible to the most well-known programming languages are also provided.

RELATED PRODUCTS

AUREA Technology also provides very compact and high performance single photon counters for the visible and NIR range. Please, contact our sales team for more information.



AUREA Technology's photon counter

ORDERING INFORMATION

CHRONOXEA_X ——— X T : TTL signals
N : NIM signals

Please contact us for custom solutions and options

NOTE

DISCLAIMER

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