

**Technical Specification of Time to Digital converter for Single Photon  
Detection**

**Item 1:**

Minimum specification for **Time to Digital Counter for Single Photon  
Detection**

Sr. no.	Specification	Value
1	RMS Jitter	35 ps or lesser
2	FWHM Jitter	80 ps or lesser
3	Digital resolution	1 ps or better
4	Input channels	8 or more
5	Dead time	6 ns or lesser
6	Data Transfer rate	8 M Tags/s or greater
7	Burst memory	8 M Tags or largers
8	Maximum output frequency	Greater than or equal to 150 MHz
9	Input Impedance	50 $\Omega$ should be included
10	Input signal range	Should be suitable for TTL pulses
11	Maximum input level	Should be suitable for TTL pulses
12	Trigger level range	0 - 5 V (TTL compatibility reqd.)
13	Minimum pulse width	1 ns or lesser should be admissible.
14	Data interface	Should include USB as one of the options

**Accessories required:**

Necessary connections for computer interfacing

Control software

Please provide a clear warranty statement for 2 years