**Attachement 1 to the Agreement - Order description**

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| Components of 32-channel time correlated single photon counting detecting system | | | | |  |
|  | Technical parameter | | | The required value of the technical parameter | The value of the technical parameter offered by the Supplier and confirmation of the functional feature of the system component offered by the Supplier |
| **1. DETECTION SETUP** | | | | |  |
| 1.1 | | | Number of detection channel | 32 |  |
| 1.2 | | | Number of TCSPC units | 32 |  |
| 1.3 | | | Maximum number of TCSPC MODULES | 4 |  |
| 1.4 | | | Connection of TCSPC MODULES with PC unit | USB lub PCIExpress |  |
| 1.5 | | | TCSPC MODULES mounting | 19’’ RACK |  |
| 1.6 | | | Time resolution (electronic) | < 12 ps |  |
| 1.7 | | | Minimum acquisition time of single DTOF | < 25 ms |  |
| 1.8 | | | Maximum countrate | > 4 MHz |  |
| 1.9 | | | Number of single photon detectors | 32 |  |
| 1.10 | | | 32 detectors power supply ( MODUŁ POWER) | Dedicated 32-channel power supply  or 2 dedicated 16-channel power supplies |  |
| 1.11 | | | Spectral range of the detectors (minimum range) | 600-900nm |  |
| 1.12 | | | Stability (shift of the maximum of instrumental response function (IRF) during the time of measurement) | < 10ps |  |
| 1.13 | | | Stabilization time of the detecting system | < 30 minutes |  |
| 1.14 | | | Diameter of an active detector area | ≥ 7 mm |  |
| 1.15 | | | Full width at half maximum of the IRF (with full area of the cathode) | < 180 ps |  |
| 1.16 | | | Overload protection of the detectors | YES |  |
| 1.17 | | | Reset of overload protection of the detectors | SOFTWARE operated, functionality of resetting all detectors simultaneously must be implemented |  |
| **2. Laser light source EMITTING SETUP** | | | | |  |
| 2.1 | | Repetition rate | | >= 50MHz |  |
| 2.2 | | Number of pulsed laser light sources @ 1 | | 4 |  |
| 2.3 | | Number of pulsed laser light sources @ 2 | | 4 |  |
| 2.4 | | Wavelength 1 | | From range 670 nm-730 nm |  |
| 2.5 | | Wavelength 2 | | From range 830 nm-850 nm |  |
| 2.6 | | Optical power | | > 10 mW |  |
| 2.7 | | Fiber coupler | | YES (SMA or FC/APC @ fiber core400 m NA=0.2 |  |