PC Specifications for sCMOS

Technical Article

This document provides the specifications of three different workstations from Dell which can be used to acquire images from the Neo 5.5, Zyla 5.5 and Zyla 4.2 USB3 and 10-tap sCMOS cameras.

Andor has provided guidelines as to the amount of data that can be acquired from each workstation based on our test results. For each specification we can recommend the suitability for 3-tap, USB 3.0 or 10-tap sCMOS and the capacity of the PC RAM or SSD for sustained acquisitions.

The specifications for all workstations are outlined below. These PC's are available to order from Andor and the product codes are defined below.

***It is important to note that the testing of these PC's was performed using the Neo/Zyla and Andor Solis software. We cannot guarantee that the same results would be achieved using other devices and software packages.**

Camera Type	PC	Capacity of RAM/SSD	Andor Product Code
Zyla 5.5 10-Tap & Zyla 4.2 10-Tap	Dell T7910XL with 1 TB SSD in RAID0	120,000 12-bit full frame images	WKST-1 WIN
Neo 5.5 3-tap / Zyla 5.5 USB3 & 10-Tap / Zyla 4.2 USB3 & 10-Tap	Dell T5810XL with 64 GB RAM	6,000 12-bit full frame images	WKST-3 WIN

PC for Zyla 5.5 10-Tap & Zyla 4.2 10-Tap (WKST-1 WIN)

Item	Recommended and tested by Andor
Chassis	T7910XL Tower
CPU	E5-2640 v3 (Eight Core, 2.6 GHz)
Memory	8GB (2x4GB) 2133MHz DDR4 ECC RDIMM
Boot Drive	500GB 2.5inch Serial ATA (7.200 Rpm) Hard Drive
OS	Windows 7 Professional 64-bit edition
Raid Controller	MegaRAID SAS 9361-8i12Gb/s PCIe SATA/SAS HW RAID controller (1GB cache)
RAID Drives	1TB – 4 x SSD RAID0 >850MB/s – Samsung SM841N
Graphics Card	4GB NVIDIA Quadro K2200
PCIe Slots	x16: Graphics Card x16: Karbon-CL 10-Tap Framegrabber x4: RAID controller x1, x4: free

PC for Neo 5.5 3-tap and Zyla 5.5 USB3 & 10-Tap and Zyla 4.2 USB3 & 10-Tap (WKST-3 WIN)

Item	Recommended and tested by Andor
Chassis	T5810XL Tower
CPU	E5-1620 v3 (Quad Core, 3.5 GHz Turbo)
Memory	64GB (8 x 8 GB), 2133 MHz DDR4 ECC RDIMM*
Boot Drive	500GB, 3.5 inch SATA, 7,200RPM
Raid Controller	None
OS	Windows 7 Professional 64-bit
Graphics Card	4GB NVIDIA Quadro K2200
PCIe Slots	x16: Graphics Card x16: Karbon-CL 10-Tap Framegrabber 2off x4, x1: free

* Note: Solis 64bit required to be able to utilise the full PC RAM available