

vPDU tests in AstroCeNT

Marcin Kuźniak, Maciej Kuźwa, Marek Walczak

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ASTROCENT



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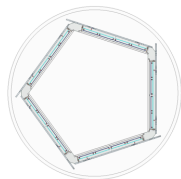


- Commercial dewar, 50 cm diameter, 130 cm height (CRYO ANLAGENBAU CS 500/1300 DF)
- ISO 7 cleanroom in Warsaw

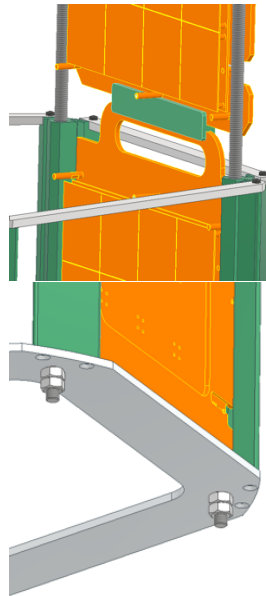
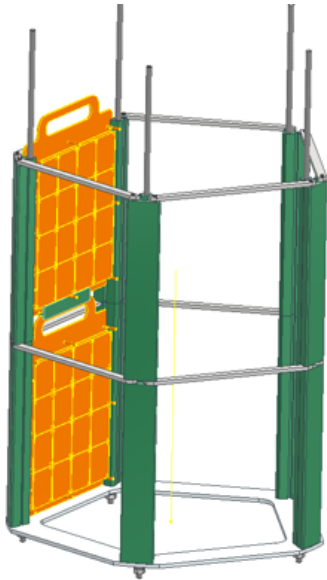
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- 2 x 5 vPDUs
- we are working on the handle - last important part of the setup

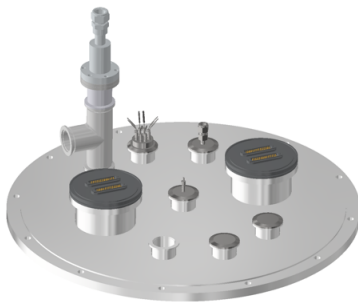


Handle - based on Edinburgh design





- 7 x 40KF + 2 x 100KF





Base platform: CAEN
VME8100VME004 21 Slot 8U
Crate



- VX2740: 64 ch differential - we will use 40 ch



- DAQ PC
 - 32 GB RAM
 - 1 TB SSD - what is the expected size of files and rate/vPDU?
- software, MIDAS
 - we can see waveforms from a generator with CAEN sw
 - MIDAS seems to be installed and working, we now need to understand how to use it



- CAEN SP5601
 - Pulse width: 8 ns
 - LED color: violet (400 nm)





- SY4527 Multichannel Power Supply System
- A4531 Primary Power Supply 600W

- A1539BP 32 Ch 100 V/20 mA Common Floating
- A1517B 6 Ch 7 V/4 A Individual Floating Channel





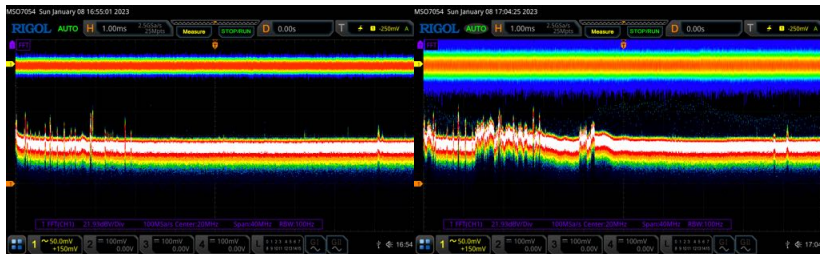
- CAEN A1517B compared against RIGOL DP832A
- 15 Ohm high power resistors ($\sim 1/2$ A at 7 V)



LV PS - no load, RIGOL

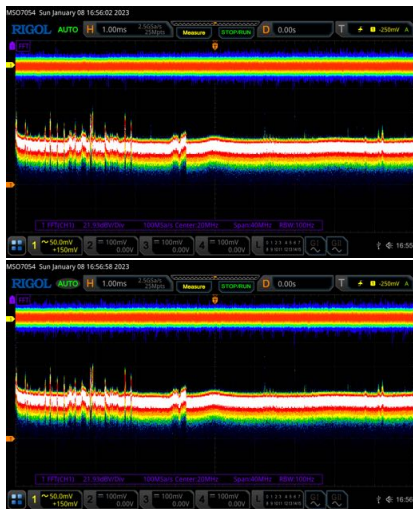


<- resistor only – RIGOL ->

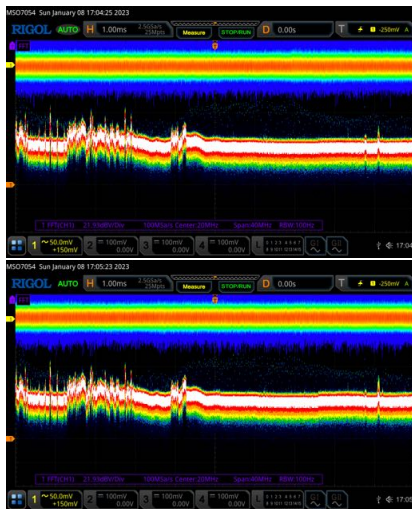


<- resistor only – CAEN ->

LV PS RIGOL vs CAEN



RIGOL: 0 V top, 7 V bottom



CAEN: 0 V top, 7 V bottom

Thermometers, k-type thermocouples

