PPD Customer's Meeting

Recent New Requests To Tech Centers, and the response:

- Additional clean room space for DES. In the near term, clean space is needed for the work on the "Multi CCD test vessel" arriving from the UofC. In the long term, clean space is needed for work on the final camera.

DES has been allocated a portion of SiDet "Lab C South". The Lab C south area is currently occupied by CMS-TOB assembly work. As CMS-TOB work finishes in August 06, more space can be allocated to DES.

Lab C South meets (or can be easily made to meet) some of the important DES infrastructure requirements: area size and headheight, cleanliness, equipment, large access doors.

- Additional clean room space for the CMS-FPIX "service cylinder assembly".

Additional space in "Lab C North" has been allocated to CMS-FPIX. Mike Roman has been appointed to coordinate and remove unneeded CDF and D0 equipment, which occupy the area.

June 12 2006

- Improve the SiDet work space for CMS-FPIX “HDI and VHDI” assembly

The Sidet Lab D cleanroom is ideal for CMS-FPIX HDI and VHDI assembly work in terms of cleanliness and personal comfort.

We have moved 2 probe stations from Lab A into Lab D.

2 vacuum ovens and 1 plasma cleaner will move into Lab D.

We have removed 1 Zeiss 500 CMM and 2 CMS-TOB teststands from Lab D in order to free up room.

• Complete the commisioning of the COUPP “outer vessel and pressure controls” (at Lab 3), and construct 3 additional units. Additional expert help on Radiopurity techniques and measurements.

The Lab 8 staff has allocated >50% of Jerry Zimmerman's time to complete the commissioning. If successful, the Lab 8 staff would proceed with 3 additional units. We have not identified additional expert help.

• Build a prototype planar x-y sci-fi tracking station for the Beams Division for use in the Switch Yard. The time scale is 3 months. If successful, we would build an additional 4-5 for BD. The items are potentially useful for tracking at Mtest and general teststand.

For BD and MTest, we are designing stations that would replace the traditional Fenker PWC chambers, and would use solely off-the-shelf electronics (No VLPC's). For general teststand use, we would like to make a crate-less system.

See http://home.fnal.gov/~hogann/techcenters/fiber-tracker

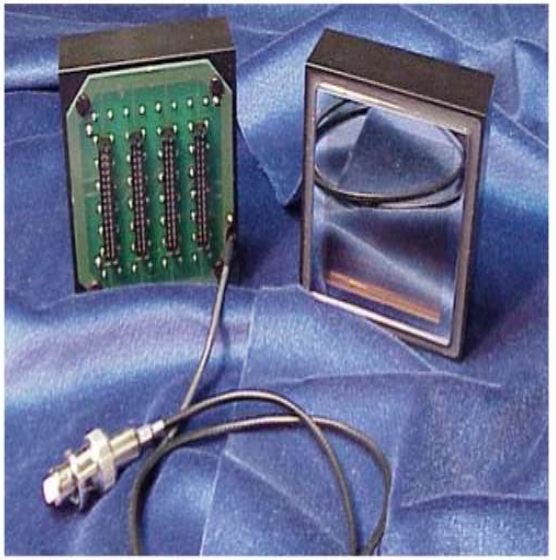
We are in the process of placing P.O.s for a Microchannel Plate Multianode PMT and scintillating fibers. The lead technician assigned is Greg Sellberg.

Photonic signals allow for compact and elegant Off-the-shelf electronics

PLANACON™ PHOTOMULTIPLIER TUBE ASSEMBLY 85011-501

BURLE

July 2005



The 85011 assembly is based on a new photomultiplier tube that uses microchannel plates (MCP) for electron multiplication, the PLANACON™. This 51 mm square head-on MCP-PMT has a very low profile, less than one inch thick including the voltage divider network. The sixty-four anodes provide 6 mm position resolution when used as a discrete pixel device. Improved resolution can be obtained using a charge-sharing technique. The dual MCP multiplier provides excellent time response, good gain, and extremely high pulse linearity. Response uniformity over the full active area is exceptional, typically 1:1.5. The assembly comes with ribbon cable connectors and an SHV cable for ease of use. Applications include specialized medical imaging, ring imaging Cherenkov counters, fluorescence microscopy, and high-speed applications such as LIDAR.

GENERAL

Parameter		Value	Unit
Spectral Response		185 to 660	nm
Wavelength of Maximum Response		400	nm
Active Area		51 × 51	mm
Photocathode Material		Bialkali	--
Window	Material	UV Grade Fused Silica	--
	Thickness	2.0	mm
Multiplier	Structure	MCP (25µm pore, 40:1 L:D)	--
	Number of Stages	2	--
Anodes	Number	64 (8 × 8)	
	Size / Pitch	5.9 / 6.5	mm
Voltage Divider Resistance		13	MΩ

Maximum Ratings (Absolute Maximum Values)

Parameter	Value	Unit
Supply Voltage	-2600	VDC
Average Anode Current, sum of all anodes	3	µA
Ambient Temperature	- 15 to + 50	°C

Suitable for Single-Photon Counting