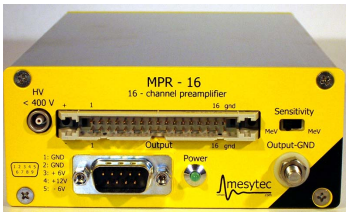
Analog Readout Electronics for Particle Detectors in Accelerator Physics

Multichannel charge sensitive preamps:

MPR-16

- 16 … 64 channels
- Several standard ranges 25 MeV ... several GeV
- Special versions for implant/decay studies
- PCB module available for vacuum use
- Special version with integrated, temp compensated, multi channel detector bias supply: **MPRB-16**



Multichannel shaping amplifiers with CFD:

MSCF-16

- 16 channel NIM module, low power design
- Active baseline restorer
- Timing filter, ECL output
- Trigger, multipl. Trigger
- Switchable shaping times
- Adjustable Gain (1...600)
- Differential (header) or unipolar (Lemo) input
- Low noise, low integral nonlinearity
- Fully controllable via front panel or remote control
- special versions for PMTs and Ge-Detectors

Multichannel constant fraction discriminator:

MCFD-16

- Integrated fast preamps, gain 1/3/10, polarity selectable, 300 MHz band width
- Fully adjustable via front or RC
- Analog amplifier outputs for direct QDC interfacing
- Walk +-100 ps
- CFD/LE discrimination selectable
- 16 ECL timing outputs
- Flexible Pattern processing
- 3 Trigger outputs
- Full pair coincidence matrix
- Built in gate generator

Four channel, 800 V detector bias supply:

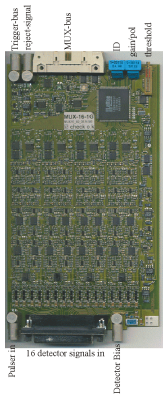
MHV-4

- Precise voltage setting up to 800 V in steps of 12.5 mV
- lowest noise voltage: < 1 mVrms at 400 V.
- Current display resolution 1 nA
- 4 large and bright LED displays allow simultaneous survey of all currents or voltages
- 4 chan temperature measure-ment and HV compensation for avalanche diodes
- Adjustable HV ramp speed
- Individual polarity for each channel
- Remote control via USB or mesytec control bus

Multichannel preamp, shaper, discriminator with multiplexed readout:

MUX-32

MUX-16 pcb



- For single / double hit applications e.g. with DSSDs or wire chambers
- Up to 128 channels on one readout bus need only 4 ADC channels
- High rate capability: up to 800 kHz on one bus
- Excellent timing resolution, 1 LE discriminator per channel
- Sensitivity and polarity selectable
- Low power consumption
- RC controllable

mesytec GmbH & Co. KG
wernher-von-braun- str. 1, 85640 putzbrunn, germany fon: +49 - 89 / 456007-30, fax : +49 - 89 / 456007-39
info@mesytec.com - www.mesytec.com