



A500 CG pulse processing unit

The A500 CG pulse processing unit and fibre optic loop controller can be used with both the in-line scintillation detector and beam loss monitor.

- Leading edge discriminator with independent threshold controls
- Maximum pulse scaling rate 100 MHz
- Ten independent fully parallel scalers
- Maximum scaler readout rate 10 kHz; readout is transparent (no dead-time during readout)
- Input impedance 50 ohm
- A500 also allows control of up to 15 devices on each of five fibre optic loops
- Easy to use, comprehensive graphical user interface
- Other services required by these systems, such as PMT/pre-amplifier power and actuator control, are provided separately. However, bespoke, fully integrated units/architecture designs are available on request

Beam Loss Monitor

The Danfysik Beam Loss Monitor is a robust mobile device for the qualitative analysis of beam losses around an accelerator. As with the in-line scintillation detector detailed above the Beam Loss Monitor is based around a BC400 crystal.

- Scintillation material: BC400, 20 mm by 20 mm
- Integrated test LED
- Full electronics suite available for data acquisition





Transmission scintillation detector

The Danfysik Scintillation Counter is a value engineered transmission detector incorporating a Bicron (BC400) scintillation piece, which is utilised to determine beam intensity.

The scintillator is optically coupled to a plexi-glass light guide, which funnels fluorescent photons produced by incoming particles to a high quality photomultiplier tube.

- Scintillation material: BC400, 70 mm by 70 mm
- Integrated test LED
- Maximum beam intensity for linear measurement: 1.6pA (protons), 10pA (C6+)
- Pneumatic actuator for positioning in/out of beam
- Full electronics suite available for data acquisition

Specifications are subject to change without notice.