

| Detector | Photon tagger | Pair polarimeter | Pair spectrometer | Upstream Photon veto | Start counter | Central drift | Forward drifts | DIRC | Time-of-flight | Barrel calorimeter | Forward calorimeter |
|---------------------------------------|-------------------------------|----------------------------|-----------------------|----------------------|--------------------|------------------------|---|---------------------|--------------------|---|---|
| Type | Scintillator | Si microstrip | Scintillator | Scintillator | Scintillator | Straw tube | Planar chamber | Quartz | Scintillator | Sci fibers | Lead glass |
| Channel count | 144 fixed 120 movable | 2048 | 32 | 112 | 40 | 3240 | 2,856 anode 11,424 cathode | 2000 TDC 32 FADC | 168 | 1920 inner 960 outer | 2500 |
| Signal source | fixed - PMT movable - SiPM | Silicon microstrip | PMT | PMT | PMT | Straw tube | anode wires cathode strips | Multi-anode PMT | PMT | SiPM | PMT |
| Physics signal | 100 pe | 22000 e | 100 pe | 100 pe | 100 pe | 338 e | 94 e | 8 pe | 500 pe | 250 pe/GeV | 250 pe/GeV. |
| Energy resolution | 0.1% (segmentation) | N/A | N/A | 10%/√E | N/A | 15% | 15% | N/A. | N/A | 2% + 5%/√E | 3.6% + 7.3%/√E |
| Single channel time resolution | 100 ps | 10 ns | 1 ns | 1 ns | 350 ps | 2 ns | 2 ns | 200 ps | 140 ps | 150 + 50/√E ps | 400 ps |
| Gain in detector | 10 ⁶ | 1 | 10 ⁶ | 10 ⁶ | 10 ⁶ | 2 x 10 ⁴ | 10 ⁵ | 10 ⁶ | 10 ⁶ | 8 x 10 ⁵ | 8 x 10 ⁵ |
| Typical charge | 16 pC | 3.5 fC | 16 pC | 16 pC | 16 pC | 1 pC | 1.5 pC anodes 0.3 pC cathodes | 1 pC | 80 pC | 32 pC/GeV | 32 pC/GeV |
| Signal range | 5 | 10 | 10 | 100 | 10 | 3 pC max 100 fC min | anodes: 0.3 pC → 3 pC cathodes: 10 fC → 1 pC | 10 | 10 | 160 pC max 1.6 pC min 0.16 pC lsb | 160 pC max 1.6 pC min 0.16 pC lsb |
| Preamp gain | no | 10 ⁴ | no | no | no | 250 | 250 | 40 | no | no | no |
| Maximum single channel rate | 5 MHz | 1 MHz | 1 MHz | 1 MHz | 10 MHz | 600 KHz | 140 KHz | 250 KHz | 6 MHz | 1.4 MHz | 2 MHz |
| Discrimination | constant fraction | no | no | no | constant fraction | no | no | yes | constant fraction | yes | no |
| Scaler | yes | no | no | no | yes | no | no | no | no | no | no |
| FADC | 8 bits 250 Msps | buffered latch | 8 bits 250 Msps | 8 bits 250 Msps | 8 bits 250 Msps | 12 bits 100 Msps | 12 bits 100 Msps | 8 bits 250 Msps | 8 bits 250 Msps | 8 bits 250 Msps 0.5 V fs | 8 bits 250 Msps 0.5 V fs |
| TDC | 62 ps | special low rate runs only | no | no | 62 ps | no | no | 125 ps | 62 ps | 62 ps | no |
| Level 1 trigger | yes (low rate runs) | no | special low rate runs | no | track count | no | no | no | track count | energy sum | energy sum |