

Detector type	Spatial resolution (μm)	Time resolution (ns)	Energy resolution FWHM (in %)
Cloud chamber	500	10^{10}	—
Spark chamber	300	3×10^8	—
Streamer chamber	300	3×10^8	—
Bubble chamber	20	10^9	—
Ionization chamber	2×10^3	10^3	2 at 100 MeV
Proportional chamber	10^3	10^3	10 at 5.9 keV
Multi-wire proportional chambers	500	500	—
Drift chamber	50	10^4	—
Time-projection chamber	200	10^5	—
Microstrip gas detector	30	100	10 at 5.9 keV
Nuclear emulsion	3	—	—
Track etch detector	10	—	—
Segmented scintillator	10^4	1	3 at 1 GeV
Segmented Cherenkov counter	10^4	0.1	10 at 1 GeV
Solid-state detector	10	10	0.1 at 1 MeV
Electromagnetic calorimeter	10^4	10	3 at 1 GeV
Hadron calorimeter	10^4	10	5 at 50 GeV
Cryogenic detector	10	10	0.1 at 5.4 MeV
Optical spectrometer	—	—	4×10^{-3} at 500 nm
Optical cryogenic detector	—	—	10^{-3} at 1 μm