

[2-4-9] **Hodoscope for Fragment/Proton (HODF, HODP)**

* Design

HODF and HODP are conventional scintillator hodoscopes. They are placed after FDC2 and ICF to measure TOF and charge of particles.

plastic scintillator	BC408, 1200mm(V) x 100mm(H) x 10mm(T)
slat	Plastic is coupled to HPK H7195 PMT (with a booster connector) via 100mm-long fishtail light guide.
Effective area	16 slats/hodoscope, 1600mm(H) x 1200mm(V)
HV	32ch/hodoscope x 2 = 64ch, with additional HV's for booster, CAEN A1733N x6(+4)
Readout	16ch CAMAC discriminator (Phillips 7106) x4, 500nsec logic & analog cable delay x 64, CAEN 32ch ADC V792AC x2 CAEN 32ch TDC V775AC x2

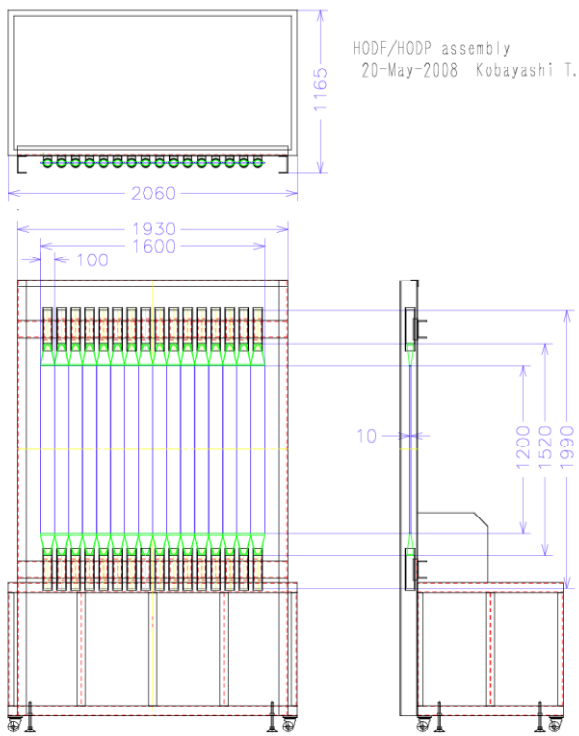


Fig 2-4-9 : HODF/HODP Assembly