

**Instrument Mass Summary**

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	Proposal Vol 1, Table 2.2.11				SRR Mass Estimate			
	Mass kg	Reserve %	kg	Tot Mass kg	Mass kg	Reserve %	kg	Total kg
<b>INSTRUMENT TOTALS</b>	<b>2557.218</b>	<b>15%</b>	<b>376.327</b>	<b>2933.545</b>	<b>2616.185</b>	<b>15.5%</b>	<b>404.871</b>	<b>3021.056</b>
<b>TRACKER</b>	<b>521.835</b>	<b>19%</b>	<b>99.621</b>	<b>621.456</b>	<b>541.169</b>	<b>19.8%</b>	<b>107.400</b>	<b>648.569</b>
Thermal & Mechanical Structures	191.416	35%	66.996	258.412	218.961	35%	76.637	295.598
Silicon detectors	73.011	3%	2.190	75.201	72.700	3%	2.181	74.881
Lead Converters	173.285	3%	5.199	178.484	171.369	3%	5.141	176.510
Electronics, Cabling, and Others	84.123	30%	25.237	109.360	78.138	30%	23.441	101.579
<b>CALORIMETER</b>	<b>1549.508</b>	<b>6%</b>	<b>100.050</b>	<b>1649.558</b>	<b>1563.795</b>	<b>6.7%</b>	<b>105.001</b>	<b>1668.796</b>
Mechanical Structures	161.597	30%	48.479	210.076	173.916	30%	52.175	226.091
Cesium Iodide	1338.302	2%	26.766	1365.068	1337.736	2%	26.755	1364.491
Electronics & Cabling	31.653	50%	15.827	47.480	31.648	50%	15.824	47.472
Others (wrapping, etc)	17.956	50%	8.978	26.934	20.495	50%	10.247	30.742
<b>ACD</b>	<b>173.631</b>	<b>31%</b>	<b>53.833</b>	<b>227.464</b>	<b>172.976</b>	<b>30.6%</b>	<b>52.995</b>	<b>225.971</b>
Detectors	84.550	20%	16.910	101.460	100.910	24.4%	24.622	125.532
Fibers, wrapping, foam spacers, etc	14.500	50%	7.250	21.750				
Phototubes, HV power, and wiring	23.800	50%	11.900	35.700	21.000	50%	10.500	31.500
Mechanical Structures	50.781	35%	17.773	68.554	51.066	35%	17.873	68.939
Electronics								
<b>GRID</b>	<b>220.244</b>	<b>38%</b>	<b>83.222</b>	<b>303.466</b>	<b>217.245</b>	<b>39.5%</b>	<b>85.875</b>	<b>303.121</b>
Grid Structure	142.979	35%	50.043	193.022	113.584	35.0%	39.754	153.338
Heat Pipes and mounts	50.000	50%	25.000	75.000	28.264	50.0%	14.132	42.397
Radiators (w/o mounts)			0.000	0.000	46.848	50.0%	23.424	70.272
Thermal Blankets	27.265	30%	8.180	35.445	28.549	30.0%	8.565	37.114
<b>DATA ACQUISITION (DAQ)</b>	<b>92.000</b>	<b>43%</b>	<b>39.600</b>	<b>131.600</b>	<b>121.000</b>	<b>44.3%</b>	<b>53.600</b>	<b>174.600</b>
TEM Modules	32.000	30%	9.600	41.600	32.000	30.0%	9.600	41.600
SIU Modules	15.000	50%	7.500	22.500	15.000	50.0%	7.500	22.500
ACD Modules	5.000	50%	2.500	7.500	34.000	50.0%	16.500	50.500
Cable Plant	40.000	50%	20.000	60.000	40.000	50.0%	20.000	60.000
Others (cable ties, bolts, etc)		0%	0.000	0.000			0.000	0.000
<b>OTHER</b>	<b>0.000</b>	<b>0%</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0%</b>	<b>0.000</b>	<b>0.000</b>