SNAP Dark Energy Observer

supernova acceleration probe

satellite baseline specifications

Aperture	1.8m
F.O.V.	1 square degree
Launch Vehicle	Delta II 7920

Image array	36k x 36k mosaic CCD
Architecture	2k x 4k 10-micron pixels
Plate Scale	10 micron/0.10 arc-sec

Image Array Bands	B,V,R,I,Z
Q.E.	65% @ 1000nm (LBNL CCD)
	92% @ 900nm
	>85% @ 400nm-800nm
Read Noise	<2-4 e-
Dark Current	0.08 e-/min/pixel
Image Array Temp.	150K

Spectroscopy	3-channel pick-off:
	325-600nm "Blue" CCD
	+ 600-1050nm "Red" LBL CCD
	+ 1050-1800nm IR (HgCdTe)
Thermal Cooling	passive

Data Downlink	320 Mbps
Data Storage	256 Gbits solid state

Pointing Stability	<0.1 arc-sec
Image Stabilization	2-axis fast steering mirror
Satellite Mass	<900kg *
Power Consumption	<400W *