

	Large-Sized Telescope (LST)	Medium-Sized Telescope (MST)			Small-Sized Telescope (SST)
		FlashCam	NectarCam	SCT	
Required energy range	20 GeV – 3 TeV	80 GeV – 50 TeV			1 TeV – 300 TeV
Energy range (in which subsystem provides full system sensitivity)	20 GeV – 150 GeV	150 GeV – 5 TeV			5 TeV – 300 TeV
Number of telescopes	4 (South) 4 (North)	25 (South) 15 (North)			70 (South) 0 (North)
Optical design	Parabolic	Modified Davies-Cotton		Schwarzschild-Couder	Schwarzschild-Couder
Primary reflector diameter	23.0 m	11.5 m		9.7 m	4.3 m
Secondary reflector diameter	--	--		5.4 m	1.8 m
Effective mirror area (including shadowing)	370 m ²	88 m ²		41 m ²	8 m ²
Focal length	28 m	16 m		5.6 m	2.15 m
Total weight	103 t	82 t		80 t	19 t
Field of view	4.3 deg	7.5 deg	7.7 deg	7.6 deg	10.5 deg
Number of pixels in Cherenkov camera	1855	1764	1855	11328	2368
Pixel size (imaging)	0.1 deg	0.17 deg	0.17 deg	0.067 deg	0.19 deg
Photodetector type	PMT	PMT	PMT	SiPM	SiPM
Telescope readout event rate (before array trigger for MSTs and SSTs)	>7.0 kHz (after LST array trigger)	>6 kHz	>7.0 kHz	>3.5 kHz	>0.3 kHz
Telescope data rates (readout of all pixels; before array trigger)	24 Gb/s	12 Gb/s			2 Gb/s
Positioning time to any point in the sky (>30° elevation)	30 s	90 s			60 s
Pointing precision	<14 arcseconds	<7 arcseconds		<10 arcseconds	<7 arcseconds
Observable sky	Any astrophysical object with elevation > 24 degrees				

(last updated: Dec 2019)