

## KOMPSAT-3 Satellite Sensor Specifications

Spectral bands	450-900 nm Pan (Panchromatic)
	450-520 nm MS1 (Multispectral), blue
	520-600 nm MS2, green
	630-690 nm MS3, red
	760-900 nm MS4, NIR (Near Infrared)
Optics	- Korsch-type telescope design on a CFRP optical bench
	- 80 cm diameter of primary mirror aperture (the mirror is lightweighted)
	- All mirrors (5) are of Zerodur design
	- Focal length = 8.6 m
	- F number = f/12
GSD (Ground Sample Distance)	- 0.7 m for Pan band at nadir
	- 2.8 m for MS bands at nadir
Swath width	15 km (at nadir)
Tilt angle	Roll: $\pm 45^\circ$ , pitch: $\pm 30^\circ$
Location accuracy	< 48.5 m CE90
Pan CCD detector module	- Line array of 24,000 pixels consisting of 2 stacks of 12 k pixels each
	- TDI (Time Delay Integration), up to 64 TDI in 4 stages
	- Pixel pitch = 8.75 $\mu\text{m}$
	- Source data rate = 16 x 15 Mpixel/s (or 3.84 Gbit/s)
MS CCD detector module	- Line array of 6,000 pixels, provision of 8 stacks, TDI capability
	- Pixel pitch = 2 x 17.5 $\mu\text{m}$
	- Binning of MS pixels (MS pixels are 4 times longer than Pan pixels)
	- Source data rate = 4 x 240 Mbit/s
Antiblooming	Yes
PRNU (Photo Response Non-Uniformity)	Yes

DSNU (Dark Signal Non-Uniformity)	Yes
SNR (Signal-to-Noise Ratio)	> 100 for Pan and MS
Data quantization	14 bit
Data compression	CCSDS 120.1-G-1E
Payload data memory	512 Gbit
Data rate	1 GB/s