



FAST Telescope, Guizhou Province, China | Feb 8, 2018 | GF-1

GF-1 SATELLITES

4 Satellites, 2 m Resolution, Optical, Free Use of 16 m Achieved Data

GF-1 (short for GaoFen-1) constellation is composed of 4 similar satellites. GF-1 is equipped with two 2 m panchromatic and 8 m multispectral cameras (PMC), and four wide-field imagers (WFI) with 16 m multi-spectral resolution and a combined swath of 800 km. The satellite allows the collection in PMC and WFI modes both simultaneously and separately. GF-1B, C or D is single-camera, collecting 2m panchromatic and 8 m multispectral resolution data. The four satellites work as a team providing massive collection, covering the whole planet only for 11 days, revisiting at any place on the Earth on a daily base.

Technical Specifications

Number of Satellites	4 identical satellites: GF-1, GF-1B, GF-1C and GF-1D		
	GF-1	GF-1B, C/D	
Mission life	8 years	8 years	
Weight	1060 kg	795 kg/satellite	
Launch time	April 26, 2013	April 11, 2018	
Orbit	Sun-synchronous, 10:30 am descending node, 645 km altitude, 98.0506° inclination angle	Sun-synchronous, 10:30 am descending node, 645 km altitude, 98.0506° inclination angle	
	2 x PM Camera (PMC)	4 x Wide Field Imager (WFI)	PM Camera (PMC)
Sensor bands	Panchromatic, blue, green, red and near-infrared	Blue, green, red and near-infrared	Panchromatic, blue, green, red and near-infrared
Resolution (at nadir)	Ppanchromatic: 2 m, multi-spectral: 8 m	16 m	Panchromatic: 2 m, multi-spectral: 8 m
Locational accuracy	50 m CE90 (w/o GCPs)		30 m CE90 (w/o GCPs)
Dynamic range at imaging	11 bits		12 bits
Swath width (at nadir)	60 km	830 km	60 km
Revisit capacity	4 days	1 day	2 days