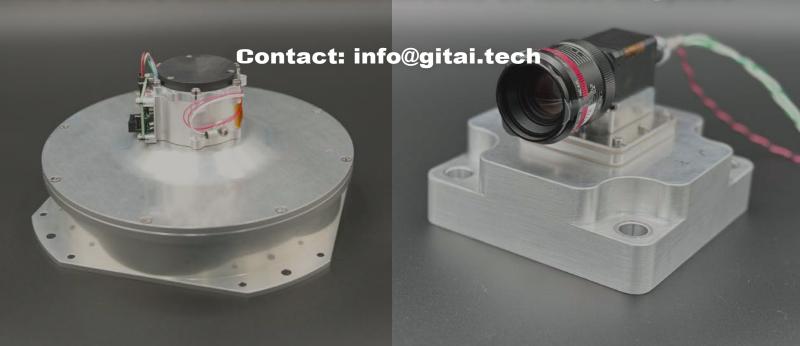


Spacecraft Platforms & Components

For safe and affordable means of labor in space

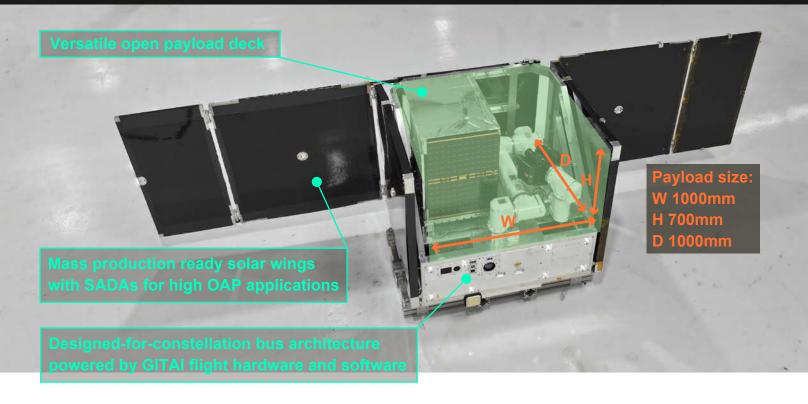




Standard Spacecraft Platform

General				
Name	GSAT-20	GSAT-50	GSAT-200	
ROM	1M USD	1.5M USD	3M USD	
Lead time	6month	6 month	6 month	
Mass w/o payload	20kg	50kg	250kg	
Available payload mass	(follow deployment)	(follow deployment)	(follow deployment)	
Payload Space	0.2m x 0.2m x 0.2m	0.5m x 0.5m x 0.3m	1.0m x 1.0m x 0.5m	
Applications	LEO, 5 years	LEO, 5 years	LEO, 5 years	
Pointing Accuracy	30 to 75 arcseconds	30 to 75 arcseconds	30 to 75 arcseconds	
CDH Config	Single	Single	Single	
Propulsion	Green Bipropellant(N2O, C3H6)	Option	Option	
Specification Power(peak W, voltage)	100 W	150 W	1000 W	
	28VDC(regulated) 40VDC(unregulated)	28VDC(regulated) 40VDC(unregulated)	28VDC(regulated) 40VDC(unregulated)	
Power(continuous)	40W	100W	750W	
I/F	Ethernet, RS422	Ethernet, RS422	Ethernet, RS422	
Launch configuration	Compatible with 16U CubeSat canistor	Falcon 9 Rideshare	Falcon 9 Rideshare XL Full Plate	
Comm	S-band X-band	S-band X-band	S-band X-band	
Option				
- Xenon EP			+80kg lsp 1000s 10mN(continuous) 10kN*s(total impulse) +0.5M USD (LT 12months)	
- Chemical propulsion	1N *1 17m/s		200m/s (200kg payload) +100kg 1N *8 10N *4 +1.0M USD (LT 12months)	
			180 m/s (200kg payload)	





Dual-use space platform for government and enterprise constellation

Payload Accommodation Specifications

- Payload Mass 200 kg

- Payload Volume 1000 mm x 1000 mm x 700* mm

(Open Deck) *Height depends on LV's payload volume

- Payload Peak Power 1000 W

- Payload OAP 750 W (with SADAs)

Voltage Regulated: 28 V Voltage

Unregulated: 40 V

S-band: 8 Mbps (up/downlink) - Data Rate

X-band: 150 Mbps (downlink)

- Data Interface Ethernet, RS-422

- OCT Accommodations Up to 4 OCTs (Customer or GITAI furnished)

Mission Specifications

- Delta-V 200 m/s (with 200 kg payload mass)

- Orbit Altitude: 400 km - 1000 km Circular Inclination: Low inclination to SSO

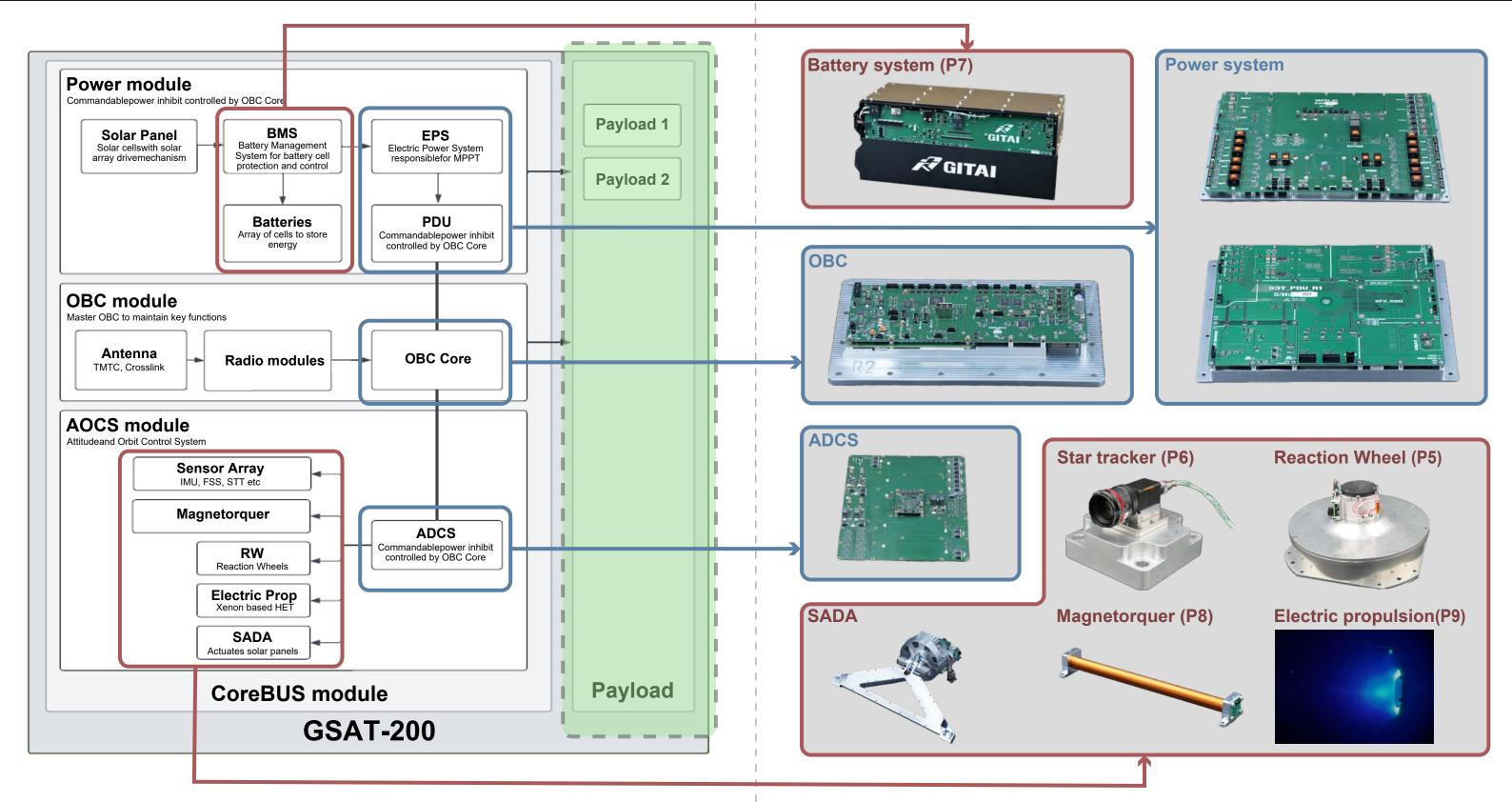
Pricing and Lead Time

- Unit Price 3.5 Million USD

- Lead Time 12 months



GSAT System Diagram





Specification

· Model Name	GRW-200

- Price[kUSD]	30 kUSD
- I HOCKOODI	OU ROOD

Comes with 110 x 100 [mm] controller

- Mass [kg] RW:2.4kg, Driver0.3kg

- Power Consumptions Steady-state at nominal voltage < 9W

Peak at nominal voltage < 150 W

- Supply Voltage nominal: 28V

lower limit: 24V upper limit: 48V

regulated/unreglated: regulated

- Data Interface RS-422

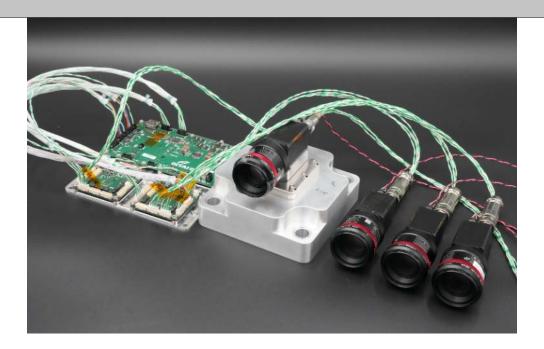
- Design Life (Years) 7

- Speed Range [RPM] 7500 /28V

- Angular Momentum Capacity [Nms] 5.9 /28V

- Torque Capability [mNm] 300





Specification

- Model Name	GSTT-1
- MOGCI MAINC	0011-1

- Price[kUSD] 12 kUSD

- Dimensions L x W x H (mm) 45x165x45(camera unit) 150x150x10(board)

- Mass (baffle & star tracker) Boards + heatsink = 500g camera + lens (1pc) = 225g

- DC Voltage[V] 12

15.0 + 3.0 * [number of cameras] - Average power consumption[W]

1

RS-422, Ethernet - Interface

7 - Design Life [Years]

2.0°/SEC - Max Tracking Rate

- Update Rate[Hz]

- Star Catalog 8819 stars

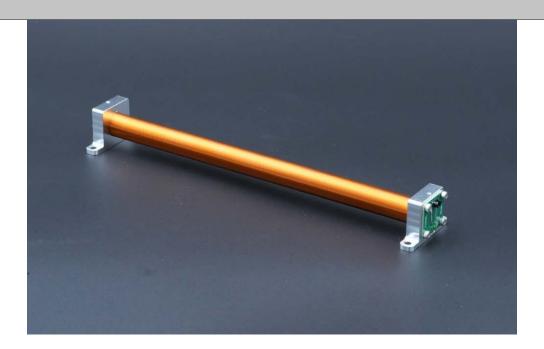




Specification

- Model Name	GBAT-600
- Price[kUSD]	TBD
- Dimensions L x W x H (mm)	196 x 452 x 104.5
- Mass [kg]	10.5
- Output Voltage [V]	40
- Capacity [Ah]	15
- Design Life [Years]	7
- Discharge Current [A]	Continuous : 30 Max Peak (5-sec): 60
- Protection Features	Overcharge, Overdischarge, Overcurrent, Over/Under Temperature, Cell Balancing





Specification

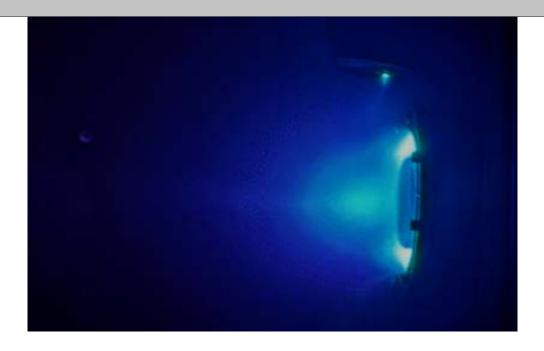
- Model Name	GMTQ-30
- Price[kUSD]	TBD
- Dimensions L x W x H (mm)	275 x 52 x 32
- Power [W]	5
- Weight [g]	500
- Design Life (Years)	7
- Moment [Am2]	30
- Current [mA]	200



Electric Propulsion(HET) -EP-

◀ Return to System Diagram

General



Specification

- Model Name	GEP-01
- Price[kUSD]	TBD
- Power Consumptions [W]	350
- Design Life [Years]	7
- Thrust Force [mN]	15
- Total Impulse [kN-s]	100
- lsp [s]	1000
- Delta-v	200m/s for a 500kg dry-mass satellite.
- Data Interface	RS-422

The EP-350 includes thruester, tank, PPU, and will be commanded throught RS-422 interface.

