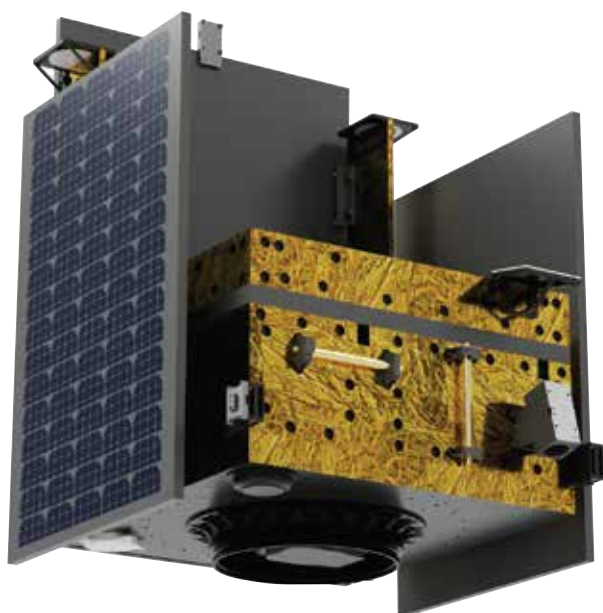


Azista 100

Modular Small Satellite Bus



DataSheet

Version: 1.0

April 2025

AZISTA INDUSTRIES PRIVATE LIMITED

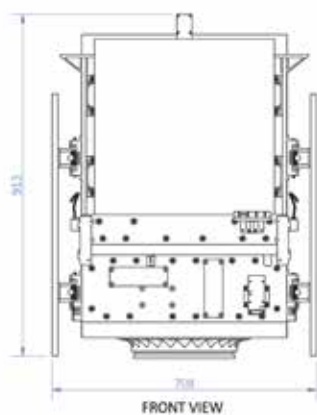
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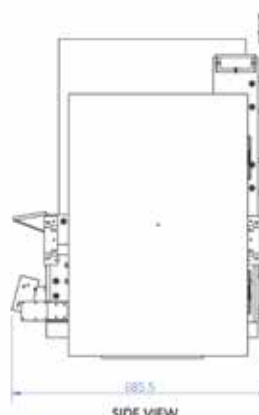


Platform layout and envelope dimensions

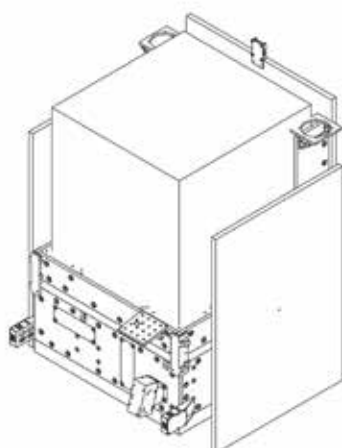
BUS DIMENSIONS



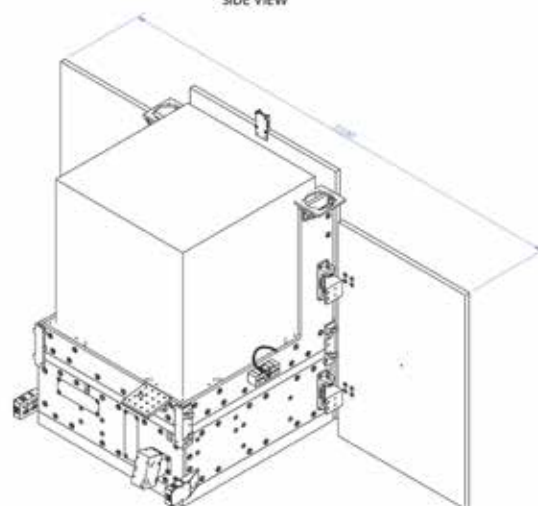
FRONT VIEW



SIDE VIEW

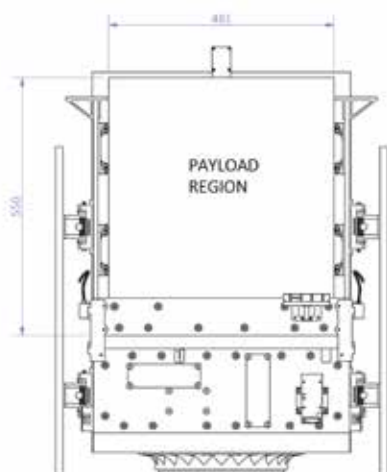


VIEW: STOWED SOLAR PANEL

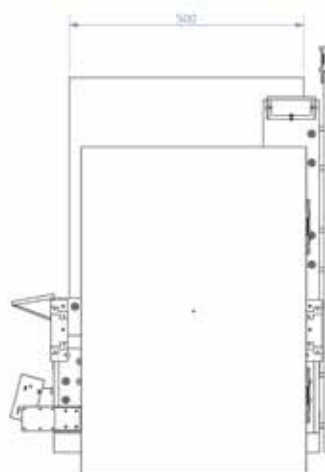


VIEW: DEPLOYED SOLAR PANEL

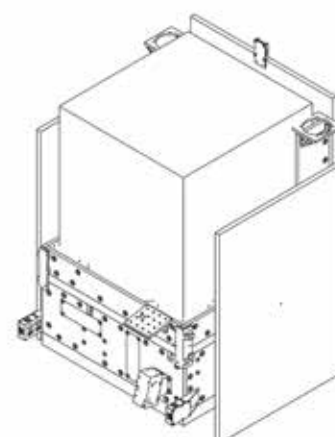
PAYLOAD DIMENSIONS



FRONT VIEW: PAYLOAD DIMENSION



SIDE VIEW: PAYLOAD DIMENSION



ISOMETRIC VIEW

Satellite Bus

Mass	55 kg
Dimensions (L*B*H)	Stowed: 708 x 685.5 x 913 mm ³ Deployed: 708 x 685.5 x 1590 mm ³
Power Generation	228 W
Battery	30 Ah (modular)
Bus Voltage	23.1 V
Absolute Knowledge error	0.0035° (1 σ)
Absolute Pointing Error	0.0038° (1 σ)
GPS Accuracy	Orbit Position Knowledge: 10m, Velocity: 0.2 m/s (1 σ), Time: < 100 ns
Slew Rate	6°/s (all axes)
Torque	36 mNm (all axes)
TMTC	S-Band, up to 112 kbps U/L, up to 512 kbps D/L (Optional: 2 nd S-Band in hot redundancy)
Encryption	CCSDS Compatible (AES 128-bit encryption)
Propulsion	Optional: Electric
Design Life	5 years
Launch Vehicle	SSLV / PSLV / Falcon 9
Deployment Ring	IBL 298/ IBL 358/ Carbonix C15"/ Carbonix C18.25"
Nominal Orbit	LEO: 500km - 600km
Mission Life	5 years

Payload

Mass	< 80 kg
Envelope (L*B*H)	500 x 481 x 550 mm ³ (inset) 520 x 500 x 470 mm ³ (overlay)
Power (Orbit Average Power)	22 W
Power (Peak for 10 minutes)	Up to 100 W
Payload Operational orbits per day (out of 15 orbits) (Assumed for SSO)	5 Orbits

Payload Interface

Data	8 x (SERDES) MGT / 2 x 10Gb Ethernet
TMTC	UART / RS422
Power	Raw Bus (23.1 V)
Payload Data Transmission (PDT)	X-Band (890 Mbps)
On Board Edge Computing	Optional
Data Storage	Expandable from 4 TB to 24 TB



Figure: Azista 100 Bus Platform Concept