

GUIDE

AQUILA SUN SENSORS

The Sun Sensor product line, known as AQUILA, provides reliable and accurate sun-angle measurements for spacecraft attitude, determination and control. Designed for high-reliability space applications, these sensors are suitable for both primary and safe-mode attitude sensing. With over 1000+ units delivered and an extensive in-orbit heritage exceeding five years in Low Earth Orbit (LEO), the NSS Sun Sensors are baselined on multiple satellite constellations. Their robust design, ultra-compact form factor, low power consumption, and wide field of view make them a preferred choice for both commercial and institutional missions. This datasheet outlines the functional, physical, and environmental specifications of the AQUILA series, including the AQUILA-A05 and AQUILA-H02/HR models.

1,000+ **SUN SENSORS DELIVERED**
260+ **UNITS IN ORBIT**
OPERATIONAL SINCE **2014**
UTILIZED ON **5+ CONSTELLATIONS**
5 YEARS **OF LIFE IN-ORBIT**



QUALIFICATIONS

APPLICATION

The Aquila is TRL 9 with extensive in-orbit heritage. The Aquila Sun Sensor has demonstrated in orbit lifetimes of >5 years in LEO and, due to its robust nature, has become a preferred choice for constellation primes. To date, >1000 Aquila units have been delivered globally. Currently, the NSS Sun Sensor is baselined on 5 constellations.

- Orbit determination and maneuvering
- Precise time stamping and synchronization

FUNCTIONAL	AQUILA-A05 (NCSS-SA05)	AQUILA-H02	AQUILA-HR
Field of view	≤114°	≤140°	≤140°
Update rate	>10 Hz (limited by customer OBC)	≤5 Hz	≤10 Hz
Accuracy	≤0.5 RMS	≤ 0.2° RMS @ 120° FOV, ≤ 0.4° RMS @ 140° FOV	≤ 0.2° RMS @ 120° FOV, ≤ 0.4° RMS @ 140° FOV
PHYSICAL	AQUILA-A05 (NCSS-SA05)	AQUILA-H02	AQUILA-HR
Dimensions	33 mm x 11 mm x 6 mm	34 mm x 40 mm x 20 mm	34 mm x 40 mm x 20 mm
Current Consumption	<10mA @ 5V	@5V [Nominal] Idle: <3mA [15mW], bootloader mode <8mA [35mW], application mode Active: <35mA [150mW]	@5V [Nominal] Idle: <40mA [200mW], bootloader mode <40mA [200mW], application mode Active: <65mA [325mW]
Mass	<5 g	<37 g	<37 g
ENVIRONMENTAL	AQUILA-A05 (NCSS-SA05)	AQUILA-H02	AQUILA-HR
Thermal (operational)	-20 °C to +60 °C	-25 °C to +70 °C	-25 °C to +70 °C
Mechanical Tests (qualification)	14.1 g _{RMS} (random), 26.25 g (sine)	34.93 g _{RMS} (random), 26.25 g (sine), 2000 g (shock)	34.93 g _{RMS} (random), 26.25 g (sine), 2000 g (shock)
Radiation (TID) (qualification)	10 kRAD (Component Level)	10 kRAD (Component Level)	30 kRAD (Component Level)
INTERFACES	AQUILA-A05 (NCSS-SA05)	AQUILA-H02	AQUILA-HR
Power supply	5 V _{DC}	+5 V _{DC} to +36 V _{DC} (5 V nominal)	+5 V _{DC} to +36 V _{DC} (5 V nominal)
Data	5 analogue channels	RS-485 / RS-422	RS-485 / RS-422
Connector	9-way female Nano-D	9-way female Micro-D	9-way female Micro-D
Mechanical	3 x M2 threaded Holes	4 x M2.5 Socket Head Cap	4 x M2.5 Socket Head Cap

ACCEPTANCE TESTING: All FM parts undergo random vibration (10 g_{RMS}) as well as thermal cycling (four-cycle ambient pressure) to five degrees beyond operational thermal specifications. However, NewSpace can perform additional environmental testing if required by a client.

CONFIGURATION MANAGEMENT: Specifications are subject to change. Please refer to the latest version



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GUIDE

PEGASUS **MAGNETOMETER**

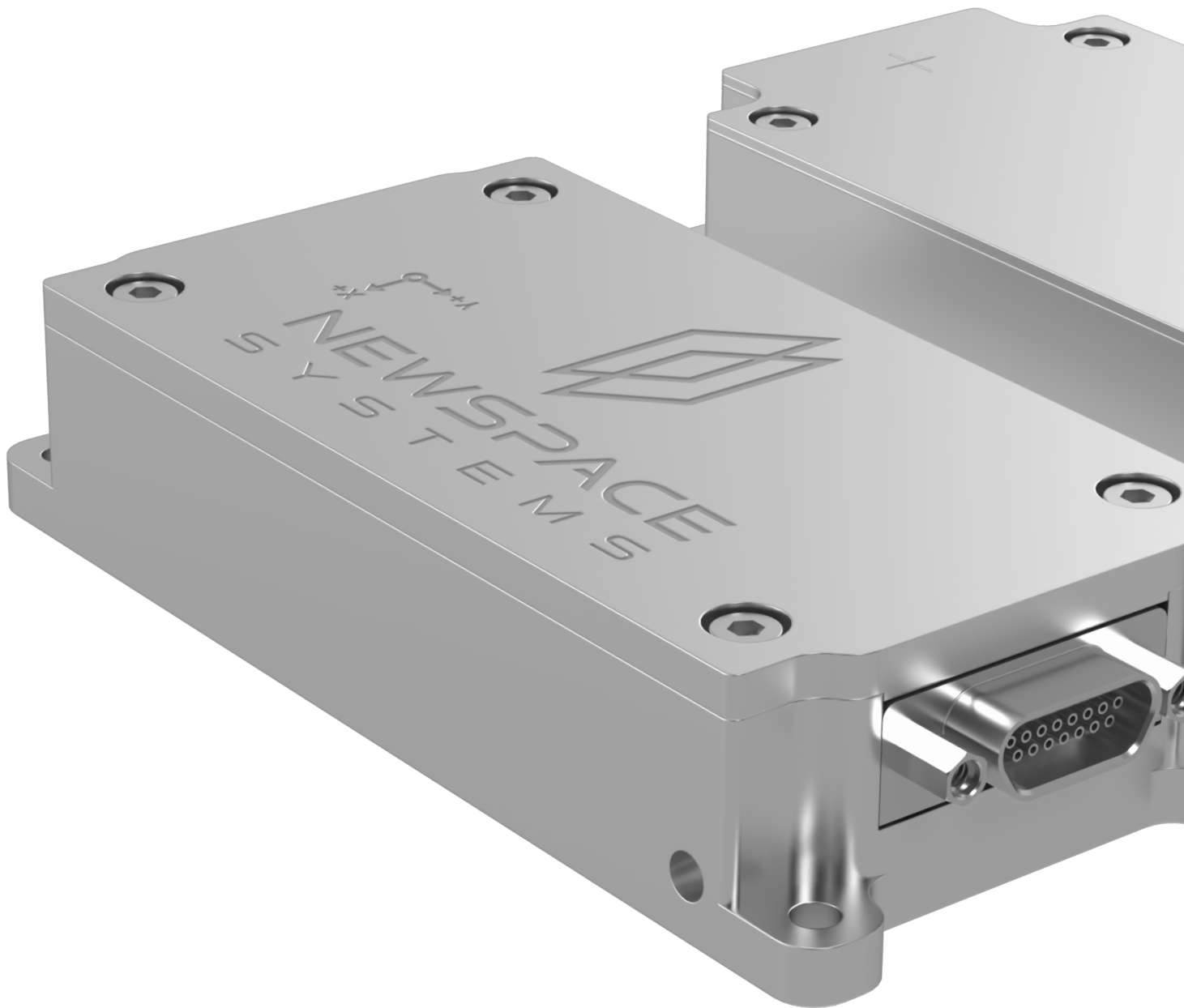
400+ **MAGNETOMETERS SOLD**

200+ **UNITS IN ORBIT**

FLOWN SINCE **2018**

UTILIZED ON **5+ CONSTELLATIONS**

The NSS tri-axial magnetometer utilises Anisotropic Magneto-Resistive (AMR) sensors, which are co-located with offset compensating circuitry. The offset compensating circuitry nulls the characteristic offset voltage of the AMR sensor, which enhances the sensors performance. The sensor provides x-, y- and z-axes magnetic field component measurements, as well as a sensor temperature measurement, which is used for the temperature compensation of the magnetic field measurement. This product includes low noise, precision processing and analogue-to-digital conversion circuitry, which improves its linearity and reduces the drift sensitivity of the sensor head. The integrated processing circuitry and sensor head provides the mission with an accurate and stable magnetic field measurement at low power consumption. The power requirement is a regulated 5V supply while the measured x-, y-, and z-axes magnetic field components are available on a digital serial interface.



QUALIFICATIONS

The NewSpace Systems (NSS) magnetometer is TRL 9 with significant in-orbit heritage. Developed in collaboration with the Space and Atmospheric Physics Group of Imperial College London, the sensor head first flew on the CINEMA mission and then as an integrated unit in July 2014. Since then, >400 units have been sold to a variety of international missions and constellation programmes. To date, this product is baselined on 5 constellation programmes.

KEY FEATURES

- ✦ Small size and low mass
- ✦ Radiation tolerant COTS
- ✦ Supplied with calibration matrix
- ✦ Simple to interface

APPLICATION

- ✦ Can be used for the calculation of magnetorquer rod control torque levels
- ✦ Attitude determination sensor when used with an IGRF reference model
- ✦ Angular rate determination sensor by comparing successive measurements

FUNCTIONAL CHARACTERISTICS	PEGASUS-1	PEGASUS-30K
Orthogonality	< 1°	< 1°
Measurement Range	-60,000 nT to +60,000 nT	±60,000 nT / ±100,000nT
Resolution	± 8 nT	< 8 nT/12 nT (Subject to change to 100 nT option)
Update Rate	< 25 Hz	< 20 Hz
Noise Density	< 16 nT/√Hz	< 16 nT/√Hz
PHYSICAL CHARACTERISTICS	PEGASUS-1	PEGASUS-30K
Dimensions	99 mm x 43 mm x 17 mm	92 mm x 43 mm x 17.5 mm
Mass	82 g	107 g
Power	< 735 mW	< 500 mW
ENVIRONMENTAL CHARACTERISTICS	PEGASUS-1	PEGASUS-30K
Thermal (Operational)	-30 °C to + 75 °C	-30 °C to +75 °C
Mechanical Tests (Qualification)	21.06 g _{RMS} (random), 25 g (sine), 2000 g (shock)	21.06 g _{RMS} (random), 25 g (sine), 2000 g (shock)
Radiation (TID) (Qualification)	10 krad (component level)	30 krad (component level)
INTERFACES	PEGASUS-1	PEGASUS-30K
Power supply	5 V _{DC}	5 V _{DC}
Data	RS-485 /RS-422	RS-485 /RS-422
Connector	9-pin Female Micro-D	15-pin Female Micro-D
Mechanical	4 x M3 Socket Head Cap Screws	4 x M3 Socket Head Cap Screws

ACCEPTANCE TESTING: All FM parts undergo random vibration (10 g_{RMS}) as well as thermal cycling (four-cycle ambient pressure) to five degrees beyond operational thermal specifications. However, NewSpace can perform additional environmental testing if required by a client.

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NAVIGATE & COMMUNICATE

GEMINI GPS | GNSS RECEIVERS & ANTENNAS

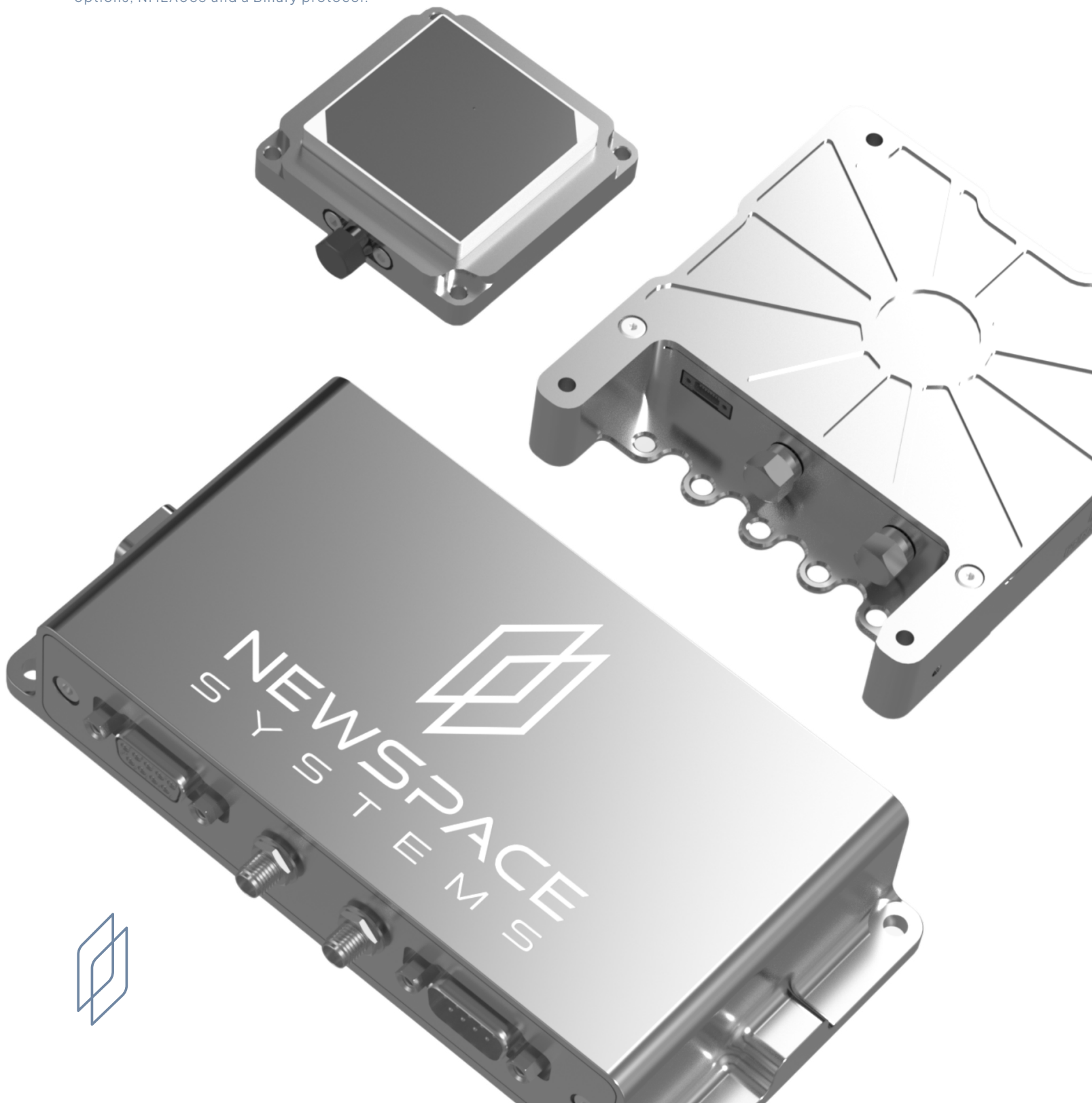
The NSS Gemini receiver range is available as an L1 frequency GPS Receiver and a multi-constellation, multi frequency GNSS receiver, utilizing a heritage chipset. Targeted towards low-cost SmallSat constellations, it allows for space altitude and velocity use cases. The Gemini-SR5 operates from a 5 V supply voltage while the Gemini-MR28 operates from an unregulated 28V supply voltage incorporating latch-up protection/detection and a watchdog timer for increased reliability and robustness. The Gemini range introduces two new protocol options, NMEA083 and a Binary protocol.

80+ **RECEIVERS DELIVERED**

60+ **IN ORBIT**

RECEIVER OPERATIONAL **SINCE 2020**

UTILIZED ON ASIAN **SAR AND EUROPEAN**
SATELLITE CONSTELLATIONS



QUALIFICATIONS

The NewSpace Systems (NSS) GPS Receivers are based on the NSS NGPS-01-422 and NGPS-03-422 which has been flying for more than a decade. To date, >60 Receivers and >70 Antennae have delivered globally to a variety of international missions and constellation programmes. The Gemini-SR5 has undergone extensive qualification, with the first flight unit delivered in 2024.

APPLICATION

- Accurate determination of orbital position
- Accurate knowledge of time
- Orbit maneuvers
- Time and/or position stamping of payload data

KEY FEATURES

- L1 5V 4 Receiver / 28 V Multi-Constellation
- Small size and low mass
- Radiation tolerant COTS
- Simple to interface

PERFORMANCE	GEMINI-SR5	GEMINI-MR28
Position accuracy [1σ]	< 2 m SEP	< 1.5 m SEP
Velocity accuracy [1σ]	< 0.1 m/s	< 0.05 m/s
Update rate	Up to 20 Hz	Up to 20 Hz
Operating frequency	GPS L1, Galileo E1, QZSS L1, BeiDou B1I, GLONASS L1OF	GPS L1/L2C, GALILEO E1/E5b, QZSS, BDS B1I/B2I, GLONASS L1/L2
TTFF (Time To First Fix)	50s	50s
PHYSICAL CHARACTERISTICS	GEMINI-SR5	GEMINI-MR28
Dimensions	96 mm x 91 mm x 18 mm	155 mm x 31 mm x 76 mm
Mass	< 154 g	< 383 g
Power (Nominal)	< 0.5 W (excluding active antenna)	< 2 W (excluding active antenna)
ENVIRONMENTAL CHARACTERISTICS	GEMINI-SR5	GEMINI-MR28
Operating Temperature	-25 °C to +70 °C	-25 °C to +70 °C
Mechanical Tests (Qualification)	14.1 g _{RMS}	14.1 g _{RMS}
Radiation (TID) (Qualification)	30 krad (component level)	30 krad (component level)
INTERFACES	GEMINI-SR5	GEMINI-MR28
Power supply	5 V _{DC}	28 V _{DC}
Data	RS-422 (NMEA/Binary)	RS-422 (NMEA/Binary)
Connector	2 x SMA Female (antenna), 15-pin Nano-D	2 x SMA Female (antenna), Male D-Sub standard density 9-pin and female D-Sub standard density 9-pin
Mechanical	4 x M3 on Cubesat PC104 footprint	4 x M3 mounting holes

ACCEPTANCE TESTING: All FM parts undergo random vibration (10 g_{RMS}) as well as thermal cycling (four-cycle ambient pressure) to five degrees beyond operational thermal specifications. However, NewSpace can perform additional environmental testing if required by a client.

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ANTENNA SPECIFICATION: SEE NEXT PAGE



GEMINI GPS ANTENNAS

SPECIFICATIONS	NANT-PTCL1
Frequency	1575.42 MHz
Bandwidth	20 MHz
Active Gain	≥16 dBiC (@ Zenith)
Beamwidth	≥ 100°(phi = 0°); ≥100°(phi = 90°)
Polarization	Right Hand Circular (RHCP)
Axial Ratio (at boresight)	<10 dB(@ Zenith)
Return Loss	≤ -5 dB
Dimensions	54 mm x 54 mm x 14.1 mm
Noise Figure	< 2 dB
Connector	50 Ω SMA female

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C O N T R O L

LIBRA REACTION WHEELS

A high-performance alternative to a propulsion-based reaction control system. Reaction wheels provide spacecraft with control torque by means of momentum exchange between the satellite body and the rotating wheel. The increasing popularity of these wheels coupled with our commitment to high quality, fit-for-purpose components has resulted in NSS offering these wheels in a range of standard sizes (LIBRA-065, LIBRA-4, LIBRA-6, LIBRA-25) or can offer a customised flywheel for mission optimisation.

800+ **REACTION WHEELS SOLD**

260+ **IN ORBIT**

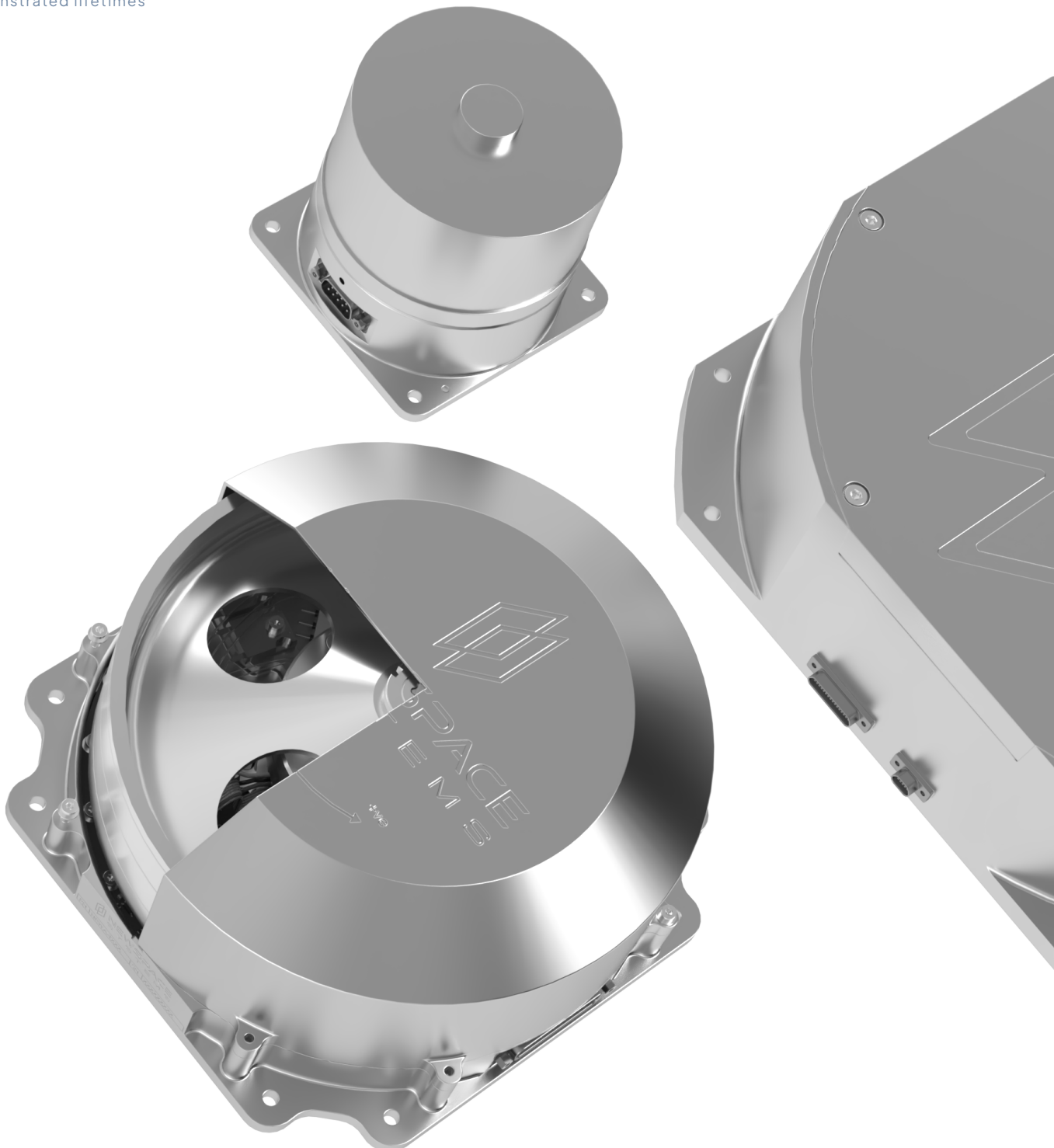
4 MILLION FAILURE-FREE, **IN-ORBIT HOURS**

FLOWN **SINCE 2014**

UTILIZED ON **MULTIPLE CONSTELLATION/
RECURRENT PLATFORMS**

KEY FEATURES

- * Torque and angular momentum capacity suited to client's mission requirements
- * Current, Speed and Torque control modes
- * Simple digital interface to the spacecraft bus
- * Long demonstrated lifetimes



QUALIFICATIONS

The NewSpace Systems (NSS) Reaction Wheel is a product range which is extensively qualified and based on a robust design with significant in-orbit heritage. The T065 wheel, which first flew in 2014, has more than 3 million failure free hours in-orbit with no reported SEUs. Since then, NSS has expanded its wheel range and now offers custom wheel solutions. With an order book of >800 wheels sold, and wheels base lined on 4 constellation programmes, the NSS wheels have become a preferred choice for longer lifetime missions and constellation programmes.

APPLICATION

- Orbit determination and maneuvering
- Precise time stamping and synchronization

FUNCTIONAL	LIBRA-065 (NRWA-T065)	LIBRA-4 (NRWA-T4)	LIBRA-6 (NRWA-T6)	LIBRA-25
Torque	20 mNm (Nominal) 24 mNm (Peak)	100 mNm (Nominal) 140 mNm (Peak)	150 mNm (Nominal) 310 mNm (Peak)	110 mNm (Nominal) 140mNm (Peak)
Momentum	0.65 Nms @ 6500 RPM (Nominal) 0.94 Nms @ 9000 RPM (Peak)	4 Nms @ 6000 RPM (Nominal) / 4.3 Nms @ 6400 RPM (Peak) @ 28V	6 Nms @ 3845 RPM (Nominal) 7.83 Nms @ 5000 RPM (Peak)	25 Nms @ 5000 RPM (Nominal @ 28V) 30 Nms @ 6000 RPM (Peak @ 28V)
Speed range	±9000 RPM (@ 24 V – 34V)	±6400 RPM (@ 28V)	±5000 RPM (@ 20 V – 36 V)	±6000 RPM (@ 28 V)
Rotor moment of inertia	0.94×10^{-3}	$6.46 \times 10^{-3} \text{ kg} \cdot \text{m}^2$	$14.9 \times 10^{-3} \text{ kg} \cdot \text{m}^2$	$48 \times 10^{-3} \text{ kg} \cdot \text{m}^2$
Speed control accuracy	±1 RPM @ >100 RPM	±1 RPM @ >100 RPM	±1 RPM @ >10 RPM ±0.14 RPM @ > 100 RPM	TBD
PHYSICAL	LIBRA-065 (NRWA-T065)	LIBRA-4 (NRWA-T4)	LIBRA-6 (NRWA-T6)	LIBRA-25
Dimensions (wheel)	102 mm x 102 mm x 105 mm	171.25 mm x 171.25 mm x 79.5 mm	206 mm x 206 mm x 100 mm	300 mm x 300 mm x 100 mm
Dimensions (electronics)	Internal	Internal	Internal	Internal
Mass	1.6 kg	4 kg	4.7 kg	<10 kg
Thermal (acceptance)	-10 °C to +45 °C	-30 °C to +65 °C	-30 °C to +55 °C	-30 °C to +65 °C
Mechanical Tests (Qualification)	16.95 g _{RMS} (random)	19.99 g _{RMS} (random)	14 g _{RMS} (random)	17.03 g _{RMS} (random)
Radiation (TID) (Qualification)	10 kRad (component level)	30 kRad (component level)	30 kRad (component level)	30 kRad (component level)
INTERFACES	LIBRA-065 (NRWA-T065)	LIBRA-4 (NRWA-T4)	LIBRA-6 (NRWA-T6)	LIBRA-25
Power supply	24 V-34 V unregulated	22 V-36 V unregulated	20 V-36 V unregulated	22 V-36 V unregulated
Power consumption	2.6 W (Quiescent) 4 W (Steady state at 3000RPM) 6 W (Steady state at 6500RPM)	1.7 W (Quiescent) 4 W (Steady state at (1500 RPM) 4.8 W (Steady state at 2600 RPM)	5.1 W (Quiescent) 15.3 W (Steady state at 3Nms) 29.3 W (Steady state at 6Nms) 139.6 W (Peak power consumption)	2.2 W (Quiescent)
Data	RS-422	2 x RS-485 (Full duplex). 460800 baud/s. Up to 4 units sharing data bus.	Redundant RS-485 (Full Duplex). 460800 baud/s. Up to 4 units sharing data bus.	Redundant RS-485 (Full Duplex). 460800 baud. Up to 4 units sharing data bus.
Connector	9-pin D-type Male	9-pin Micro-D Socket (Power) 31-pin Micro-D Socket (Data)	9-pin D-type Male (Power) 25-pin D-type Male (Data)	9-pin Micro-D Socket (Power) 31-pin Micro-D Socket (Data)

ACCEPTANCE TESTING: All FM units undergo random vibration as well as thermal cycling (four-cycle ambient pressure) to five degrees beyond operational thermal specifications. However, NewSpace can perform additional environmental testing if required by a client.

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C O N T R O L

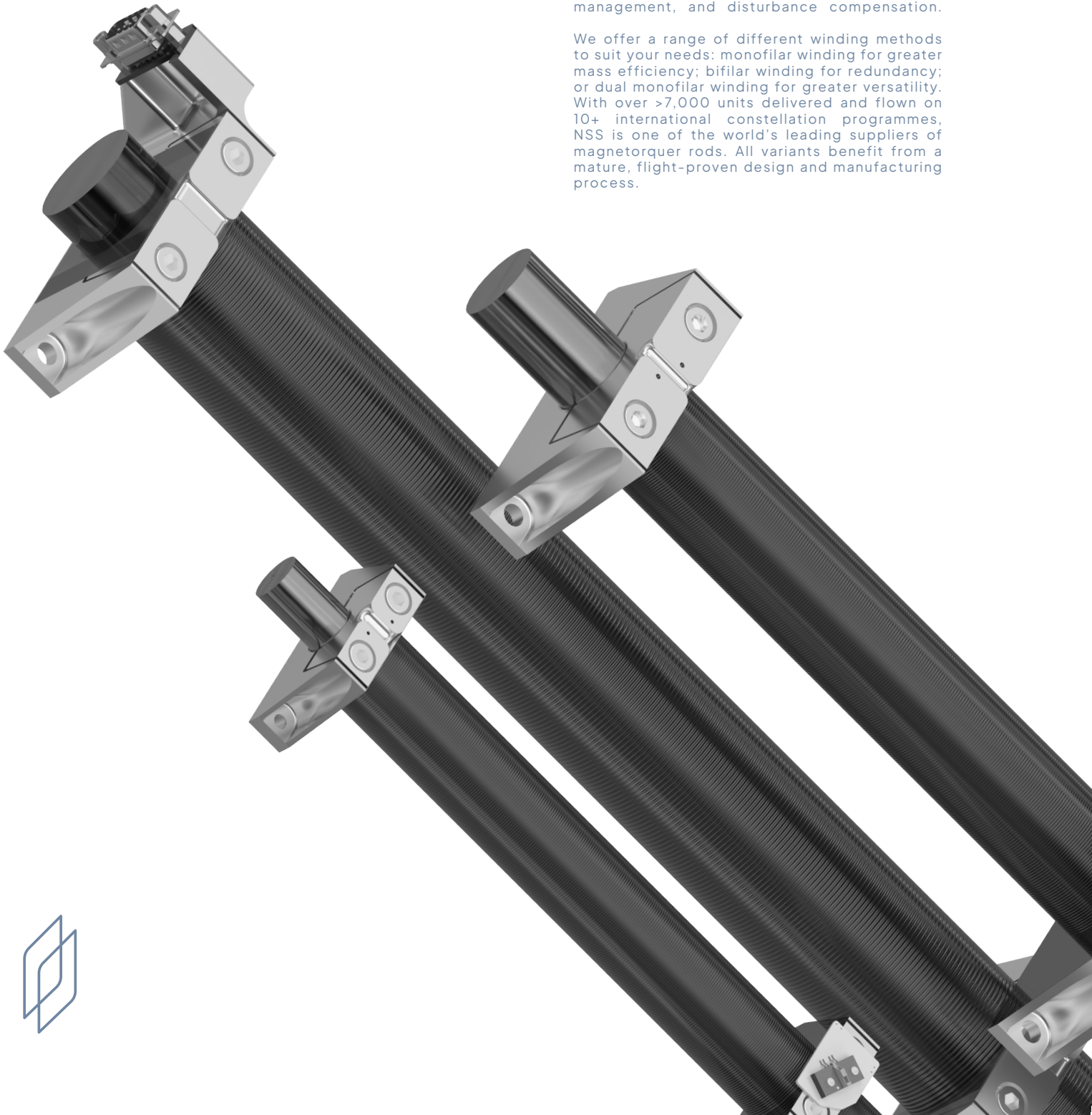
TAURUS MAGNETORQUER RODS

7000+ **TORQUER RODS SOLD**
3,500+ **IN ORBIT**
FLOWN SINCE **2014**
UTILIZED ON **10+ CONSTELLATIONS**

Magnetorquer rods are a method of controlling the attitude of a spacecraft in orbit around earth by interacting with the planet's local magnetic field. They can be used on their own or, more usually, in combination with reaction wheels by facilitating the dumping of excess momentum in the reaction wheels without the need for a complex propulsion system.

NSS magnetorquer rods comprise of an electromagnetic coil wound over a magnetic alloy core. When the coils are energized by an electric current, an electromagnetic field is generated and amplified by the core, ultimately producing a strong magnetic dipole moment. This enables controlled magnetic torque generation for momentum management, and disturbance compensation.

We offer a range of different winding methods to suit your needs: monofilar winding for greater mass efficiency; bifilar winding for redundancy; or dual monofilar winding for greater versatility. With over >7,000 units delivered and flown on 10+ international constellation programmes, NSS is one of the world's leading suppliers of magnetorquer rods. All variants benefit from a mature, flight-proven design and manufacturing process.



QUALIFICATIONS

The NewSpace Systems (NSS) magnetorquer rod designs are TRL 9 with extensive in-orbit heritage. First flown in 2014, since then, NSS has become one of the largest magnetorquer rod manufacturers globally, having sold over >7000 rods to a variety of international missions and constellation programmes, all with differing performance requirements. To date, the NSS magnetorquer rods are baselined on >10 constellation programmes.

APPLICATION

- Spacecraft orbital stability
- De-saturation of Reaction Wheels
- De-tumbling

KEY FEATURES

- Mass, power and length can be optimised for a given moment requirement
- Volume and mass efficient
- Very low residual magnetic moment
- Redundant windings available
- Simple interface

FUNCTIONAL CHARACTERISTICS TAURUS MAGNETORQUER RODS

Magnetic moment (nominal)	0.2 Am ² – 400 Am ² (+)
Linearity (across operating range)	±5%
Residual moment	< 3 Am ²

PHYSICAL CHARACTERISTICS

Dimensions	70 mm – 780 mm (+)
Mounting feet	2–3 [Dependent On Length]
Mass	26 g – 10,000 g (+)
Power (nominal)	0.1 W – 20 W (+)

ENVIRONMENTAL CHARACTERISTICS

Thermal (acceptance)	–50 °C to + 90 °C
Mechanical Tests (qualification)	23.6 g _{RMS} (random)

INTERFACES

Power supply	5 V _{DC} – 34 V _{DC} (+)
Connector	Molex Pico-Lock (4–pin) Harwin Gecko (6–way) Axon Microstrip (4–pin) Positronic D-Sub (9–pin) Glenair Micro-D (9–pin)
Mechanical	2 × Socket head cap screws per mounting bracket

ACCEPTANCE TESTING: All FM parts undergo random vibration (10 g_{RMS}) and thermal cycling (four-cycle ambient pressure) to five degrees beyond operational thermal specifications. However, NewSpace Systems can perform additional environmental testing if required by a client.

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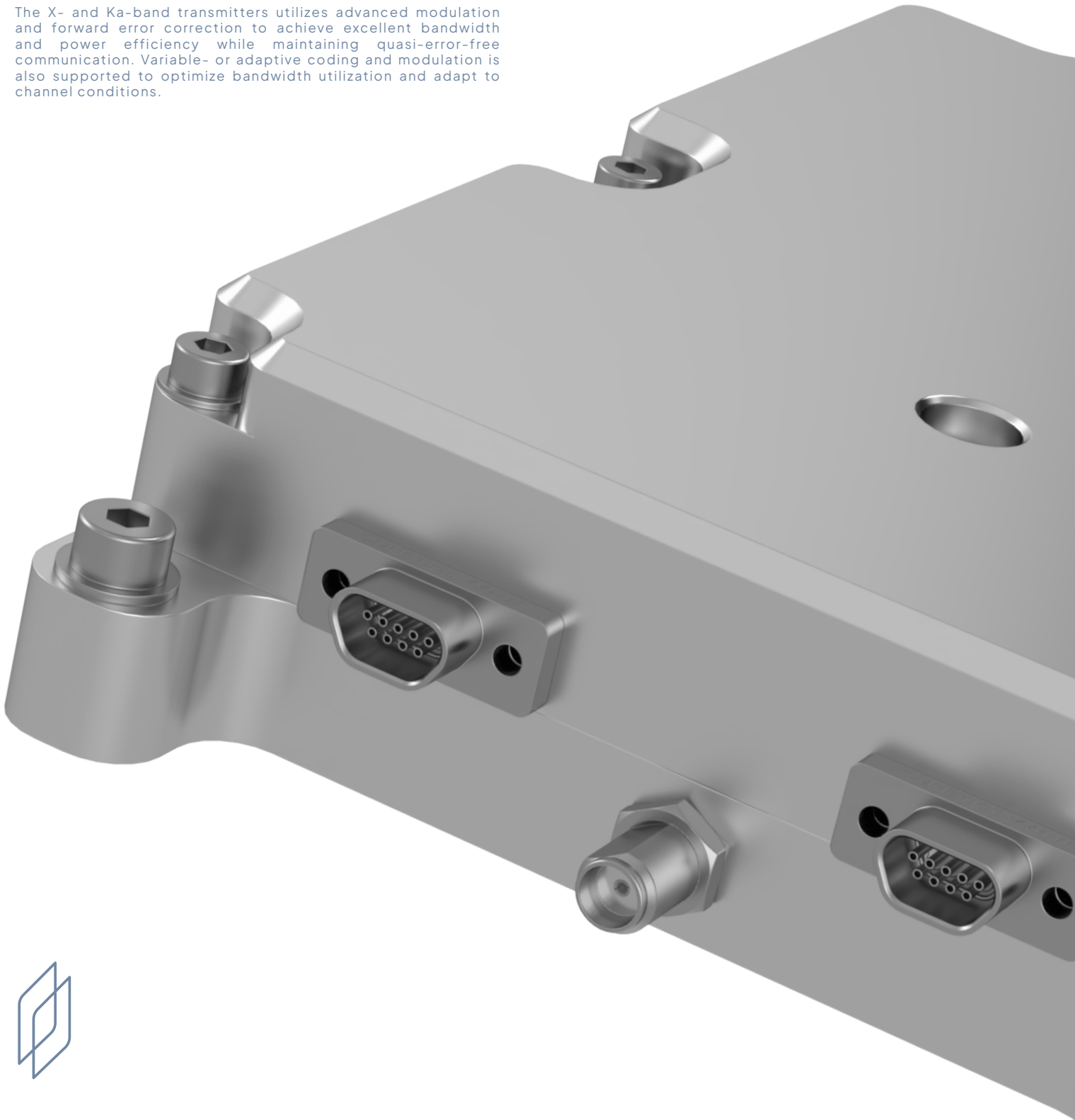
COMMUNICATE

LYNX TRANSMITTERS & TRANSCEIVERS

NewSpace Systems offers a suite of communication products targeting the earth exploration satellite service. A S-band tracking, telemetry, and command (TT&C) transceiver is available, as well as high data-rate transmitters in the X- and Ka-bands. All communication products are fully CCSDS compliant.

The S-band transceiver is a highly configurable software-defined radio that offers reliable and secure full-duplex communication. Pseudo-noise ranging and data encryption are available as options.

The X- and Ka-band transmitters utilize advanced modulation and forward error correction to achieve excellent bandwidth and power efficiency while maintaining quasi-error-free communication. Variable- or adaptive coding and modulation is also supported to optimize bandwidth utilization and adapt to channel conditions.



KEY FEATURES (S-BAND TRANSCEIVERS)

- Full Duplex Operation
- CCSDS Compliant Framing and Error-Correction coding
- Optional Encryption

APPLICATION (S-BAND TRANSCEIVERS)

- TT & C: Telemetry Tracking Telecommunication & Control

QUALIFICATIONS (S-BAND TRANSCEIVERS)

The Lynx series Transmitters and Transceivers were designed with a radiation level >30 krad TID at component level, making it suitable for LEO missions of up to 10 years. The X-Band TX is operational over a temperature range from -35 to +65 degrees celsius and can survive temperatures of -40 to +85. To be fully compliant the transmitter was designed and tested in accordance with MIL-STD-461F Electromagnetic compatibility.

APPLICATION (TRANSMITTERS)

- Earth Exploration - Satellite Service: X- and Ka-band high data - rate transmitter for payload data downlink
- Intersatellite Data Links: X- and Ka-b and high data-rate transmitter for intersatellite data links

KEY FEATURES (TRANSMITTERS)

- Quasi-error-free (QEF) communication
- Variable and adaptive coding and modulation

FUNCTIONAL	S- BAND TRANSCEIVER TRANSMITTER	RECEIVER	LYNX-X (X-BAND TRANSMITTER)	LYNX-KA (KA-BAND TRANSMITTER)
Frequency	2200 to 2290 MHz	2225 to 2110 MHz	8.025 to 8.4 GHz	25.5 to 27 GHz
Output Power	Adjustable from 0.5 to 2 W		Adjustable from 0.5 to 2 W	Adjustable from 0.5 to 2 W
User Data Rate	Up to 10 Mbps	32 kbps to 2.048 Mbps	400 Mbps	1 Gbps
Sensitivity		-105 to -87 dBm		
PHYSICAL	S- BAND TRANSCEIVER (TRANSMITTER & RECEIVER)		LYNX-X	LYNX-KA
Dimension	150mm x 100 mm x 30 mm		150 mm x 100 mm x 30 mm	150 mm x 100 mm x 30 mm
Mass	< 650 g		< 650 g	< 650 g
Power	<20 W (<5 W receive only)		< 25 W	< 25 W
ENVIRONMENTAL	S- BAND TRANSCEIVER (TRANSMITTER & RECEIVER)		LYNX-X	LYNX-KA
Thermal (acceptance/ operational)	-35 °C to +65 °C		-35 °C to + 65 °C	-35 °C to + 65 °C
Mechanical Tests (qualification)	4.93 g _{RMS} (random), 26.25 g (sine), 2000 g (shock)		4.93 g _{RMS} (random), 26.25 g (sine), 2000 g (shock)	4.93 g _{RMS} (random), 26.25 g (sine), 2000 g (shock)
Radiation (TID) (qualification)	30 krad (component level)		30 krad (component level)	30 krad (component level)
INTERFACE	S- BAND TRANSCEIVER (TRANSMITTER & RECEIVER)		LYNX-X	LYNX-KA
Power Supply	16 V _{DC} to 36 V _{DC}		16 V _{DC} to 36 V _{DC}	16 V _{DC} to 36 V _{DC}
Data Interface	LVDS, LVCMOS		Ethernet, SpaceWire	Ethernet, SpaceWire
Control and Telemetry	RS-422		RS-422, CAN	RS-485, CAN
Connector	31- pin female Micro-D		31-pin female Micro-D	31-pin female Micro-D

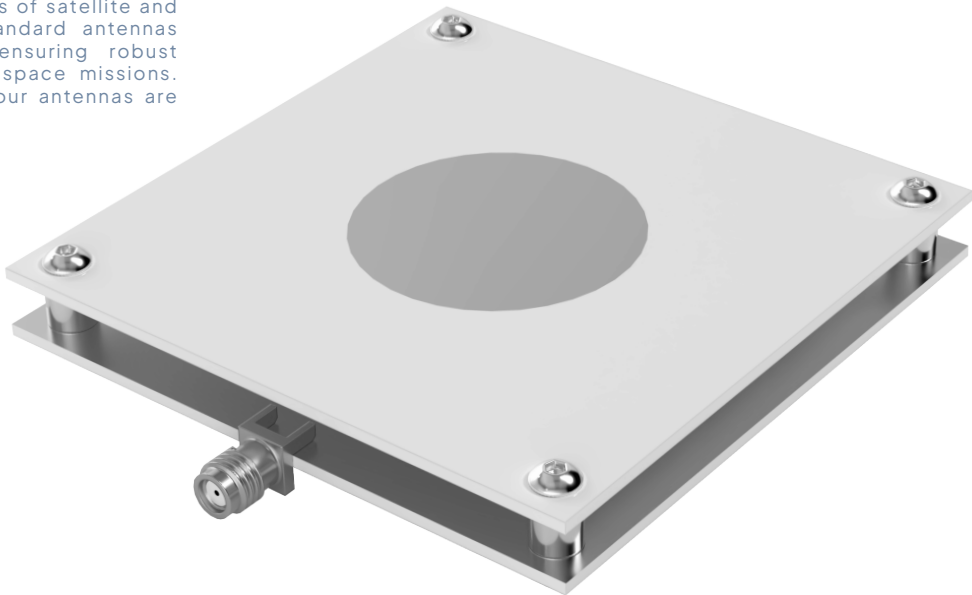
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COMMUNICATE

LYRA RF ANTENNAS

NewSpace Systems offers a range of high-reliability antennas designed to meet the stringent requirements of satellite and aerospace applications. Our range of standard antennas is available from S-band frequencies, ensuring robust communication and data transmission for space missions. With a focus on durability and efficiency, our antennas are engineered for precision and reliability.



APPLICATION (LYNX)		KEY FEATURES (LYNX)
+ Earth Exploration-Satellite Service + Intersatellite Data Links		+ The Lyra is designed for use with the transceiver, providing seamless integration.
FUNCTIONAL	LYRA-S- WB	LYRA-S- HG
Frequency	2025– 2290 MHz	2025– 2290 MHz
	100°	40°
Return loss	< -10 dB	< -10 dB
Active gain	≥ 5 dBi	≥ 12 dBi
Polarization	RHCP or LHCP preconfigurable	RHCP or LHCP pre - configurable
Axial Ratio	<3 dB	<3 dB
PHYSICAL	LYRA-S- WB	LYRA-S- HG
Dimensions	86 mm x 86 mm x 17 mm	176 mm x 176 mm x 17 mm
Connector	SMA	SMA

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