

NEWSPACE MARKET · COMPANY PROFILE



Anywaves

France · founded 2017 · anywaves.com

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as of 23 August 2026



Anywaves

Anywaves is a global leader in Space RF and Payload Subsystem Technologies, founded in April 2017 in Toulouse, France. The company designs, manufactures, and qualifies high-performance space antennas, RF front-ends, software-defined radio (SDR) platforms, and integrated payload electronics for satellite missions across LEO, MEO, GEO, and interplanetary orbits. Products support telecommunications, Earth observation, navigation, scientific exploration, and defense programs, with flight heritage on over 200 missions worldwide. In 2025, Anywaves merged with Luxembourg-based EmTroniX to form a unified Space RF and Payload Subsystems group, combining Anywaves' flight-proven antenna product lines with EmTroniX's embedded RF electronics and signal-processing expertise. The combined company operates across entities in France, Luxembourg, and the United States, employing more than 110 people, enabling end-to-end RF subsystems from antenna to signal chain. Anywaves maintains full in-house control of the value chain — from initial design and qualification through series production — at production facilities in Toulouse. The company is EN 9100 certified and has been selected for programs at ESA (Hera mission), Thales Alenia Space, Rocket Lab, and major constellation operators.

This profile is generated from the live NewSpace Market catalogue. Specifications are as published by the manufacturer; every product links to a page where a request for quotation reaches the company directly.

SERVICES

Services

Electrical Ground Support Equipment (EGSE) Design and Manufacturing

Anywaves designs and manufactures Electrical Ground Support Equipment (EGSE) for satellite RF testing and validation, enabling end-to-end verification of antennas and RF chains directly on spacecraft

Qualification and Test Campaign Support

Anywaves supports qualification and test campaigns, including test plan definition, execution support, data analysis, and participation in review boards.

RF and Electronics Subsystem Integration

Anywaves supports a higher level of integration for mission-critical spacecraft functions by combining flight-proven antenna product lines with embedded RF and signal-processing electronics.

Space Hardware Design Expertise

Anywaves offers end-to-end space hardware design expertise, covering RF engineering, electronics design, mechanical and thermal analysis, and embedded software development.

Technical Consultancy and Co-development

Anywaves acts as an engineering partner, offering technical consultancy and co-development services from requirements definition through to flight acceptance for new payloads or RF/electronics subsystems

Product catalogue



ANYWAVES

Choke Ring Ka-band TT&C Antenna

The Anywaves Ka-Band TT&C Antenna is a compact, reliable solution for telemetry, tracking and command operations in the Ka-band, available in Rx, Tx, and Rx/Tx models.

TRL	7
Frequency band	Rx: 29.5–30 GHz Tx: 19.7–20.2 GHz
Polarization	Option 1 & 2: Left or Right Hand Circular Polarization (LHCP or RHCP) Option 3: LHCP in Rx
Envelope size	Option 1 : (Rx) 108 × 108 × 44 mm Option 2 : (Tx) 150 × 150 × 60 mm Option 3 : (Rx/Tx) 90
Realized gain	Option 1: Rx: > 5 dBi @ boresight > 0 dBi @ ±80° Option 2: Tx: > 3 dBi @ boresight > 0

TRL 7 price on request datasheet



ANYWAVES

Compact S-Band TT&C Antenna

The Anywaves Compact S-Band TT&C Antenna is an ultra-compact, TRL 8 antenna for satellite telemetry, tracking and command in the S-Band frequency range of 1.98 to 2.29 GHz, fea

Frequency band	1.98 GHz to 2.29 GHz
Polarization	Left and/or Right Hand Circular Polarization (single or dual simultaneously)
Envelope size	L 70.9 × W 70.9 × H 30.33 mm (connectors included)
Realized gain	> 5.4 dBi @ boresight > 4.2 dBi @ ±30° > 0.5 dBi @ ±60°
TRL	8
Mass with connector	< 106 g

TRL 8 price on request datasheet



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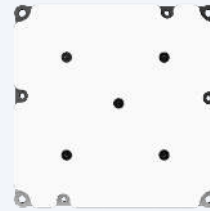
Compact Wideband Antennas

Anywaves' Compact Wideband Antennas are custom-designed payload antennas for spectrum monitoring, Space Situational Awareness (SSA), GNSS augmentation, and spectrum surveillance ap

Frequency band	UHF to S-band (custom – defined per project, from ~300 MHz to ~3 GHz)
Polarization	Single-circular polarization (LHCP or RHCP, custom)
Fractional bandwidth	Up to 100%
Size	<1U footprint
TRL	9

flight proven · TRL 9 price on request

[datasheet](#)



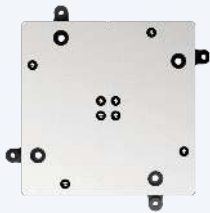
ANYWAVES

Compact X-Band Dual Polarized Antenna

The Anywaves Compact X-Band Dual-Polarized Antenna is a TRL 7 data downlink antenna for LEO satellites, providing simultaneous LHCP and RHCP on two dedicated SMA connectors from a

Frequency band	8.025 GHz to 8.4 GHz
Polarization	Simultaneous Left and Right Hand Circular Polarization (LHCP + RHCP)
Envelope size without connector	L 100 × W 100 × H 26.8 mm (external protruding height: 9.31 mm)
Realized gain	> 15.5 dBi @ boresight @ 8.2 GHz
TRL	7
Mass with connector	153.5 g ± 8g

TRL 7 price on request [datasheet](#)



ANYWAVES

Compact X-Band Payload Telemetry Antenna

The Anywaves Compact X-Band Antenna is a TRL 9, flight-proven antenna for payload telemetry downlink from LEO satellites to ground stations, offering high data rates in an ultra-co

Frequency band	7.9 GHz to 8.5 GHz
Polarization	Left or Right Hand Circular Polarization
Envelope size without connector	L 100 × W 100 × H 16.2 mm (protruding height: 6.5 mm)
Realized gain	15.5 dBi @ 8.2 GHz
TRL	9
Mass with connector	67.5 g (±4 g)

flight proven · TRL 9 price on request

[datasheet](#)



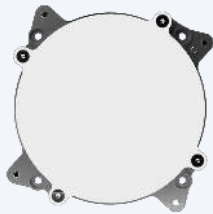
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Direct Radiating Array Antenna

The Anywaves Direct Radiating Array Antenna is a custom-designed, high-gain flat antenna solution for satellite payload applications in Ku and Ka band, where high power handling an

Frequency band	Ku band to Ka band (custom – defined per project)
Polarization	Left or Right Hand Circular Polarization (custom)
Realized gain	> 30 dBi (design target – scalable per mission)
Fractional bandwidth	~10%
Profile thickness	< 15 mm (without connector)
Sidelobe levels	~15 dB

price on request [datasheet](#)



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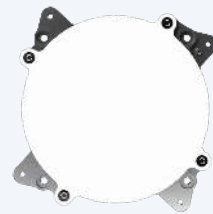
GNSS All-Bands Antenna

The Anywaves GNSS All-Bands Antenna is a TRL 9 navigation antenna for LEO satellites, covering the full 1160 MHz to 1610 MHz frequency range to receive all GNSS constellations simultaneously.

Frequency band	1160 MHz to 1610 MHz GPS L1/L2/L5, Galileo E1/E5a/E5b/E6, GLONASS G1/G2/G3, BeiDou B1/B2a/
Polarization	Right Hand Circular Polarization (RHCP)
Envelope size without connector	99.4 × 99.4 × 16.2 mm (external protruding height: 8.6 mm)
Realized gain	> 0 dBi @ boresight
TRL	9
Mass with connector	125.7 g ± 6g

flight proven · TRL 9 price on request

[datasheet](#)



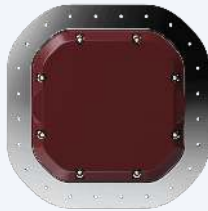
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GNSS All-Bands Antenna with LNA Integrated Board

The Anywaves GNSS All-Bands Antenna with LNA Integrated Board is a TRL 7 active navigation antenna for LEO satellites, combining full multi-constellation GNSS coverage with an integrated LNA.

Frequency band	1160 MHz to 1610 MHz – GPS L1/L2/L5, Galileo E1/E5a/E5b/E6, GLONASS G1/G2/G3, BeiDou B1/B2
Polarization	Right Hand Circular Polarization (RHCP)
Envelope size (antenna + LNA block)	L 99 × W 99 × H 58 mm
LNA block gain	Typical 22 dB (lower bands) / 20.5 dB (upper bands)
Noise figure	Typical 1.8 dB
TRL	7
Mass (antenna + LNA block)	285 g ± 29g

TRL 7 price on request [datasheet](#)



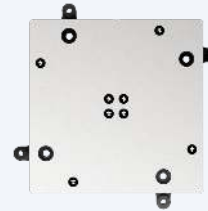
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GNSS All-Bands Launcher Antenna

The Anywaves GNSS All-Bands Launcher Antenna is a TRL 8 navigation antenna specifically designed for launch vehicles, providing simultaneous multi-constellation GNSS reception from

Frequency band	1.16 GHz to 1.61 GHz – GPS L1/L2/L5, Galileo E1/E5a/E5b/E6, GLONASS G1/G2/G3, BeiDou B1/B2
Polarization	Right Hand Circular Polarization (RHCP)
Envelope size	150 × 150 × 30 mm
Realized gain	> 0 dBi @ boresight > -2 dBi @ ±30° > -6 dBi @ ±60°
TRL	8
Mass with connector	Antenna: 162g ± 8g Flat mechanical bracket: 106g Thermal shield: 62 g

TRL 8 [price on request](#) [datasheet](#)



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GNSS Antenna for Small Satellites

Miniaturized multi-constellation GNSS patch antenna for GPS, Galileo, GLONASS, and BeiDou reception on orbit.

Frequency	L1/E1 (1575.42 MHz)
Gain	≥3 dBic
Mass	<30 g
Operating temperature	-40 to +85 °C
Polarization	RHCP

[price on request](#)



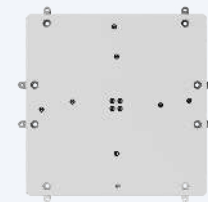
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GNSS L1/E1 Bands Antenna

The Anywaves GNSS L1/E1 Bands Antenna is a TRL 8 navigation antenna for LEO satellites, designed for high-accuracy GPS L1 and Galileo E1 positioning with a compact footprint.

Model	ASA-052026
Frequency band	GPS L1 (1 563–1 587 MHz) Galileo E1 (1 575.42 MHz nominal)
Polarization	Right Hand Circular Polarization (RHCP)
Envelope size with connector	L 96.6 × W 96.6 × H 23.75 mm
Realized gain	> 6.5 dBi @ boresight > 4.5 @ ±30° > 0 dBi @ ±60°
TRL	8
Mass with connector	103 g ± 5g

TRL 8 [price on request](#) [datasheet](#)



ANYWAVES

High Gain X-Band Payload Telemetry Antenna

The Anywaves High Gain X-Band Antenna delivers more than 20 dBi of realized gain at 8.2 GHz, enabling maximum data throughput for Earth observation and remote sensing missions.

Realized Gain	> 20 dBi
Configuration options	LHCP, RHCP
Frequency band	7.9 GHz to 8.5 GHz
Polarization	Left or Right Hand Circular Polarization
Envelope size without connector	L 200 × W 200 × H 16 mm
Realized gain	> 20 dBi @ boresight @ 8.2 GHz
TRL	5

TRL 5 [price on request](#) [datasheet](#)

ANYWAVES

Ka-Band High-Gain Antenna

High-gain Ka-Band antenna enabling Gbps-class data downlink from small Earth observation satellites.

Frequency band	Ka-Band (26.5–40 GHz)
Gain	>30 dBi
Eirp	>40 dBW
Mass	<500 g

price on request



ANYWAVES

Low-Noise Block Downconverter 1–12 GHz – Space LNB

The Anywaves Low Noise Block Downconverter (LNB) is a compact, fully customisable RF front-end component for satellite and CubeSat communication systems, providing low-noise amplif

Frequency coverage	1 GHz to 12 GHz (three sub-bands: 1–2 / 2–6 / 6–12 GHz)
RF architecture	Dual input RF, Dual output IF & common LO (Local Oscillator)
IF (Intermediate Frequency) bandwidth	Up to 400 MHz
Noise figure	Optimised per band (down to 1.2 dB)
Power consumption	≤ 5 W (dual-channel)
Qualification	Space-grade, TRL 9

price on request

[datasheet](#)



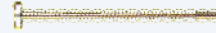
ANYWAVES

Quad-Ridged Horn Antenna

The Anywaves Quad-Ridged Horn Antenna is a custom-designed, full-metal wideband antenna for satellite payload applications requiring simultaneous coverage of a wide frequency range

Frequency band	S to X band – S+C band version: ~2–6 GHz C+X band version: ~6–12 GHz (custom per project)
Polarization	Dual – linear and circular (simultaneous)
Realized gain	S+C band version: > 6 dBi at boresight (S- to C-band) C+X band version: > 8 dBi at boresight
Fractional bandwidth	Up to 100%
Radiation efficiency	> 90% (C+X band version, full-metal design)
Size	S+C band version: < 110 × 110 × 200 mm C+X band version: < 60 × 60 × 150 mm
TRL	8

TRL 8 price on request datasheet



ANYWAVES

Quadrifilar Helix Antenna

Anywaves Quadrifilar Helix Antennas are custom-designed payload antennas for LEO satellites requiring uniform coverage across their ground footprint, available in deployable and fi

Polarization	Single-circular polarization (LHCP or RHCP, custom)
Frequency range	UHF to C-band (custom – defined per project)
Radiation pattern	Isoflux – customised gain profile to your coverage requirements
Fractional bandwidth	~10% (per frequency version)
TRL	9

flight proven · TRL 9 price on request

datasheet



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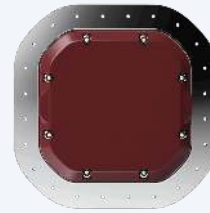
Reflectarray Antenna

The Reflectarray Antenna replicates the performance of a parabolic reflector using a series of flat, foldable panels engineered to reflect and phase-control RF waves, delivering hi

Central frequency	X-band to Ka-band (scalable toward Q/V band)
Polarization	Dual-circular polarization (simultaneous LHCP and RHCP)
Realized gain	Up to 40 dBi (design target – optimised per project)
Fractional bandwidth	Up to 15%
Stowed dimensions	360 × 210 × 30 mm (compact stowed volume for launch)
TRL	9 – In orbit

flight proven · TRL 9 price on request

[datasheet](#)



ANYWAVES

S-Band Launcher Antenna

The Anywaves S-Band Launcher Antenna is a compact, TRL 8 antenna for telemetry, tracking and command (TT&C) on launch vehicles, designed to withstand the extreme thermal and me

Frequency band	2.025 GHz to 2.29 GHz
Polarization	Left or Right Hand Circular Polarization
Envelope size	145 × 145 × 30 mm
Realized gain	> 6.0 dBi @ boresight > 2.0 dBi @ ±30° > -4.0 dBi @ ±60°
TRL	8
Mass with connector	Antenna: 136g ± 3g Flat mechanical bracket: 166g Thermal shield: 60 g

TRL 8 price on request [datasheet](#)



ANYWAVES

S-Band TT&C Antenna

The Anywaves S-Band TT&C Antenna is a flagship telemetry, tracking, and control antenna with strong flight heritage and TRL 9, perfectly suited for LEO platforms.

Frequency band	From 2.025 GHz to 2.29 GHz
Polarization	Left or Right Hand Circular Polarization
Envelope size without connector	L 84.3 × W 84.3 × H 12.1 mm ³
Realized gain	> 6.5 dBi @ boresight > 4.5 dBi @ ± 30° > 0 dBi @ ± 60°
TRL	9
Mass with connector	136g

price on request [datasheet](#)



ANYWAVES

Slotted Waveguide Array Antenna

A custom-designed, high-gain flat antenna solution for satellite payload applications requiring gains above 20 dBi in the Ku or Ka band, built from a full-metal structure.

Frequency band	Ku band to Ka band (custom – defined per project)
Polarization	Left or Right Hand Circular Polarization (custom)
Realized gain	> 20 dBi (design target – optimised per project)
Fractional bandwidth	~5% (in circular polarization)
Profile thickness	< 10 mm (without connector)
TRL	5

TRL 5 price on request [datasheet](#)



ANYWAVES

Test Hat for GNSS All-Bands Antennas

The Anywaves Test Hat for GNSS All-Bands Antennas is a ground support equipment (GSE) tool for performing end-to-end RF testing of the Anywaves GNSS All-Bands Antenna and receiver

Coupling factor	~-29 dB – variation
Envelope size with connector	Ø 118.8 mm × 105.74 mm
Mass with connector	915 g (±5 g)
Qualification temperature	-40°C to +70°C (TVAC compatible)

[price on request](#) [datasheet](#)



ANYWAVES

Test Hat for S-Band TT&C Antennas

The Anywaves Test Hat for S-Band TT&C Antennas enables complete end-to-end RF testing of S-Band TT&C antennas and transceiver chains directly on the satellite platform, from

Frequency band	1 980 MHz to 2 290 MHz (> 310 MHz bandwidth)
Coupling factor	~-29 dB
Envelope size with connector	Ø 117 mm × 102.74 mm
Mass with connector	919 g
Qualification temperature	-40°C to +70°C (TVAC compatible)

[price on request](#) [datasheet](#)



ANYWAVES

Test Hat for X-Band Antennas

The Anywaves Test Hat for X-Band Antennas is a ground support equipment (GSE) tool for performing end-to-end RF testing of Anywaves X-Band payload downlink antennas directly on the

Frequency band	7.9 GHz to 8.5 GHz
Coupling factor	> 31 dB between 7.9 and 8.5 GHz
Envelope size without connector	100.2 × 100.2 × 106.2 mm
Mass with connector	615 g (±5%)
Qualification temperature	-40°C to +85°C (TVAC compatible)

[price on request](#) [datasheet](#)

ANYWAVES

VILSA SDR — Software Defined Radio Payload

Reconfigurable software-defined radio payload for small satellites supporting multiple waveforms and protocols.

Frequency range	0.3–6 GHz
Instantaneous bandwidth	up to 200 MHz
Mass	<300 g
Power consumption	<10 W
Interface	SpaceWire / UART

[price on request](#)



ANYWAVES

VILSA Software Defined Radio

The VILSA SDR is a versatile, fully reconfigurable Software Defined Radio for space missions, combining a high-performance digital core with a multi-channel RF frontend in a rugged

In-flight reconfigurability	Yes, via Zynq® UltraScale+ SoC
RF channels	Up to six receive and four transmit channels (configurable as 6Rx/2Tx or 4Rx/4Tx)
Architecture	Distributed board architecture (four modular boards)
Mission lifetime	5-year mission lifetime (designed for)
Operating frequency range	50 MHz to 7 GHz (direct sampling mode), up to 10 GHz (integrated superheterodyne receiver)
Supported frequency bands	VHF, UHF, L-band, S-band, C-band, X-band
Maximum instantaneous bandwidth per channel	100 MHz (if all channels active)

[price on request](#)



ANYWAVES

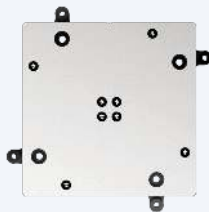
VILSA XDL X-Band Downlink Transmitter

The VILSA XDL is a high-speed X-band downlink transmitter designed for high-throughput payload data transfer in demanding space missions, leveraging DVB-S2X adaptive modulation.

Frequency band	X-Band – 8.025 to 8.400 GHz
Transmit power	Configurable from +28 to +38 dBm
Data rate	Up to 800 Mbps (using APSK 32/64)
Supported standard	DVB-S2X with adaptive modulation
Weight / Dimensions (XDL)	≈ 1,375 g / 88 × 55 × 210 mm
Weight / Dimensions (Deep-space filter)	≈ 400 g / 180 × 32 × 120 mm
Operating environment	>5-year lifetime in LEO – 18 krad TID – -20°C to +50°C

[price on request](#)

[datasheet](#)



ANYWAVES

Wide Beam X-Band Payload Telemetry Antenna

The Anywaves Wide Beam X-Band Antenna provides payload telemetry downlink across a wider field of view than the Compact X-Band Antenna, operating from 8.025 to 8.4 GHz with a Half

Frequency band	8.025 GHz to 8.4 GHz
Envelope size with connector	L 100 × W 100 × H 16.2 mm
Realized gain	> 5.0 dBi @ boresight, > 4.0 dBi @ ±30°, > -1.0 dBi @ ±60°
TRL	8
Mass with connector	67.5 g (±3 g)
Beam Pattern	~86° HPBW
Configuration options	LHCP, RHCP

TRL 8

price on request

[datasheet](#)

Contact Anywaves

Open the company profile on NewSpace Market to see full specifications and datasheets, and to send a request for quotation that reaches the manufacturer directly.

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