NEWSPACE MARKET

NEWSPACE MARKET · COMPANY PROFILE

Leonardo SpA (Space Division)

Italy · founded 1948 · leonardo.com/en/activities/space

6	3
PRODUCTS	SERVICES

newspacemarket.com/companies/leonardo-spa-space-division/

as of 20 August 2026

ABOUT

Leonardo SpA (Space Division)

Leonardo SpA (Space Division) designs, develops, produces, and integrates space launchers and solid and liquid fuel propulsion systems for tactical missiles, space launchers, and satellites. The company also designs and develops space systems, manages launch services, and provides orbit and ground segment satellite control. Its product lines include Earth observation services, integrated communications, satellite navigation and localization, and support for scientific programs. Additionally, it designs, develops, and produces dual-satellite systems for telecommunications, environmental and terrestrial climate monitoring, defense and security, scientific exploration and research, and space infrastructure. Leonardo is a technological partner of governments, defense agencies, institutions, and enterprises.

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

Maintenance and System Upgrade

Ensures operation of products and systems through worldwide maintenance centers and manages system upgrades.

Satellite Services

Offers design and development of space systems, launch services management, orbit and ground segment control, and various satellite applications.

Training Services

Offers civil and military training for pilots, maintainers, and operators using advanced simulation and learning environments.

PRODUCTS

Product catalogue

LEONARDO SPA (SPACE DIVISION)

A-STR Autonomous Star Tracker

The Leonardo A-STR (Autonomous Star Tracker) is a medium-FOV star tracker in a single assembly housing a radiation-hardened MPP CCD detector. Provides autonomous attitude acquisiti

Detector	MPP CCD (radiation-hardened)
FOV	16.4 x 16.4 deg
Dynamic Range	1.5-5.5 Mi
Max Stars Tracked	10
Tracking Rate	Up to 2 deg/s
LiS Acquisition Time	<6 s
Update Rate	10 Hz, 4 Hz

flight proven · TRL 9 price on request

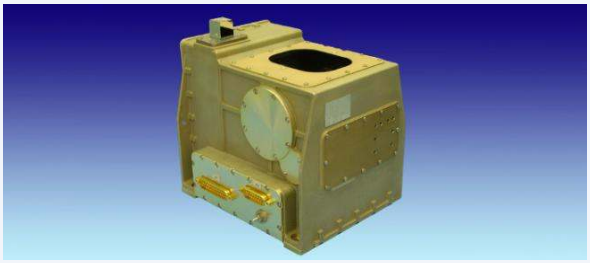
LEONARDO SPA (SPACE DIVISION)

AA-STR Autonomous Star Tracker

The Leonardo AA-STR (Autonomous Star Tracker Advanced) is a next-generation star tracker using an HAS APS (CMOS Active Pixel Sensor) detector — the first star tracker with CMOS tec

Detector	HAS APS (CMOS Active Pixel Sensor)
FOV	20 x 20 deg
Dynamic Range	1.5-5.5 Mi
Max Stars Tracked	15
Tracking Rate	Up to 2 deg/s
LiS Acquisition Time	<9 s
Update Rate	10/8/5/4 Hz

price on request



LEONARDO SPA (SPACE DIVISION)

IRES Infrared Earth Sensor

Two-axis infrared Earth horizon sensor for GEO/MEO 3-axis spacecraft: 14-16.25 um band, <0.05 deg accuracy, 10Hz, <2.5kg, <4W, 15-year lifetime. Installed on 300+ units in

Operating Band	14-16.25 um (thermal IR)
Earth Acquisition Range	15,300-53,000 km
Operational Altitude	Up to 140,000 km
Accuracy (random, 3-sigma)	<0.05 deg
Accuracy (bias)	<0.02 deg
Update Rate	10 Hz
Pointing Range GEO (pitch/roll)	+/-5.5 / +/-2.5 deg

flight proven · TRL 9 price on request

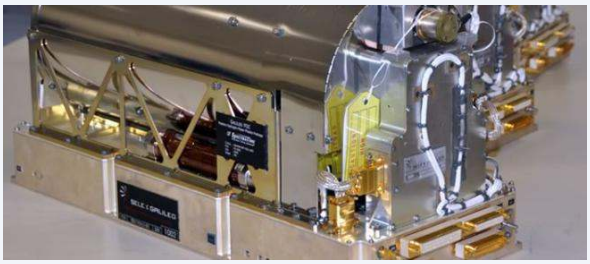
LEONARDO SPA (SPACE DIVISION)

Mini-PHM Passive Hydrogen Maser

The Leonardo Mini-PHM (Miniaturized Passive Hydrogen Maser) is a compact space atomic clock developed under ESA/ASI contract in partnership with Orolia Switzerland, aimed at the Ga

Output Frequency	10.00285741 MHz (fH/142)
Output Level	+7 dBm
Frequency Drift/Day	<=1e-14 (after 1 week); <1e-15 (after 30 days)
ADEV @ 1 s	6.5e-13
ADEV @ 100 s	6.3e-14
ADEV @ 10,000 s	7e-15
Thermal Sensitivity	<1e-15/deg C

price on request



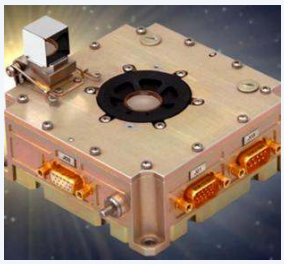
LEONARDO SPA (SPACE DIVISION)

PHM Passive Hydrogen Maser

The Leonardo PHM (Passive Hydrogen Maser) is the master clock of the Galileo Navigation Satellite System and the most precise spaceborne atomic clock ever developed for an operatio

Output Frequency	10.00285741 MHz (fH/142)
Output Level	+7 dBm
Frequency Drift/Day	<=1e-14 (after 1 week); <1e-15 (after 30 days)
ADEV @ 1 s	1.8e-12
ADEV @ 100 s	7e-14
ADEV @ 10,000 s	7e-15
Thermal Sensitivity	<2e-14/deg C

price on request



LEONARDO SPA (SPACE DIVISION)

S3 Smart Sun Sensor

The Leonardo S3 (Smart Sun Sensor) is a two-axis solar sensor based on an APS (Active Pixel Sensor) CMOS detector, combining the functions of fine and coarse sun sensors in a singl

Detector	APS CMOS
FOV	128 x 128 deg (resizable)
Accuracy (2-sigma)	<0.02 deg
Resolution	<0.005 deg
Update Rate	10 Hz
Altitude Range	3,000-40,000 km (interplanetary up to 50 AU)
Spinning Rate	Up to 100 rpm

flight proven · TRL 9 price on request

Contact Leonardo SpA (Space Division)

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.

`https://newspacemarket.com/companies/leonardo-spa-space-division/`

`https://www.leonardo.com/en/activities/space`