Astronode S+

Ready to install
satellite communication device

BIDIRECTIONAL

The Astronode S+ sends your messages, gets them acknowledged and receives your control commands.

COST-EFFICIENT

Ready to connect. No resources required in electronic and RF design, enabling short time to market.

SMALL FORM FACTOR

The integration of the Astronode S+ and the L-Band patch antenna means compact size and robust data connection.

Product description

The Astronode S+ is a ready to install satellite comunication device, based on an Astronode S and an Astronode Patch Antenna.

It connects to your application via the full Astronode S digital interface or via RS232, both available on the industrial grade board-to-cable connector.

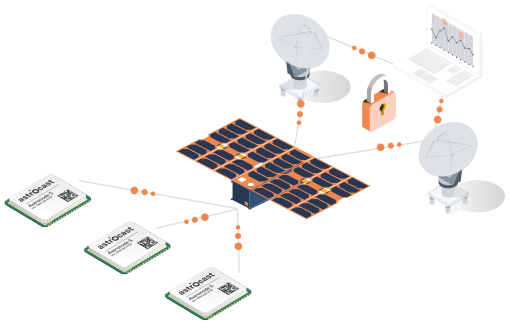
The Astronode S+ integrates both new applications as well as retrofits existing or in the field applications. It comes in a small form factor enabling discrete installations. Minimum environmental protection against humidity and extreme temperatures must be provided for operation.

Typical use cases

Maritime
Container tracking, Fishing buoys

Agriculture
Fuel management, Precision farming

Environment
Weather data, Flow monitoring



Satellite Network

Astrocast's nanosatellite LEO Network has brought together sustainability and state-of-the-art technology. Our existing satellite network, once fully completed, will enable low latency global transmission of messages with additional unicast and multicast downlink capability. Our Swiss-made satellites are equipped with propulsion giving us greater control of the entire network and the ability to avoid unlikely collisions with space debris whilst assisting with the deorbiting of end-of-life satellites.

Technical specifications

Dimensions	70mm x 65mm x 14.15mm	
Weight	38g ±1	
Power supply options	3.3V DC ±5% / 5.0V DC ±10%	
Peak power consumption	< 0.35W	In Tx mode
Deep sleep current	<500nA	
Connector	Molex Nano-Fit male	PN:1054051212
Operating temperature range	-20°C to 70°C / -4°F to 150°F	
Interface options	UART & digital IOs	3.3V
	RS232	5V
Antenna	Astronode Patch Antenna	Ceramic patch
Antenna GND plane	65mm x 65mm	Centered antenna
Antenna frequencies	1525-1559 MHz downlink	1626-1660.5MHz uplink
Realized gain at Zenith	3 dBic	RHCP, max
Realized gain at 35° elevation	-1 dBic	RHCP
Beamwidth	100°	RHCP
Encryption	2-level 256-bit AES	Unique device keys
User payload size per message	1-160 Bytes	Total message count subject to data plan
End to end network latency	15min	Location dependent, with full network deployed
Certified	CE & FCC, RoHS & REACH	
Data Access	API or online portal	

For more information visit astrocast.com

Questions?

Get in touch