

WIRELESS SPACE

Modifitm

CUTTING CORDS IN SPACE™



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BREAKING THE WIRED BARRIER IN SPACE

Today's wired components are the bottleneck to rapid reusability, manufacturing, and long-term sustainability in space.

Systems that rely on wires are slow to test and build, expensive to operate, and nearly impossible to repair.

ModiFi[™] reduces cabling and wiring on your mission while providing flexibility to MOD[™] components and sensors.

This all happens within your existing design and component interfaces.



HOW WIRELESS WORKS

ModiFi[™] enables spacecraft components to be modular and wirelessly interchangeable.

The ModiFi[™] router creates a localized communication network that supports over 8,000 components with up to 2km range.

Small customizable interface dongles (MODs) are easily plugged in.

And MOD™components use existing interface ports for wireless connectivity and real-time data transfer.

WHY WIRELESS WORKS

10x More Robust, Reliable, and Secure Than Standard Wi-Fi

State-of-the-art Security And Encryption

High Throughput

2km Range

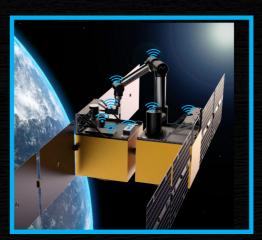
Low-size, Weight, and Power Hardware

Sub-ghz Wi-fi Alliance Certified Protocol

Robust communications protocols eliminate 99% of the traditional connectivity issues

WHAT WIRELESS LOOKS LIKE











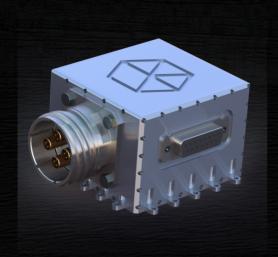


WHERE WIRELESS WORKS

- In-Space Servicing, Assembly, and Manufacturing (ISAM)
- Space Stations, Platforms, and Infrastructure
- Satellite Manufacturing, Integrators, and Constellations
- Launch Vehicles and Deployers
- Testing, Integration, Simulation, SWARM, RPOD
- Lunar Habitats, Rovers, and Robotics
- Spacecraft Components, Sensors, Avionics, and Payloads



MODIFI ROUTER PERFORMANCE SPECS



Mass ~ 281g

Dimensions $71 \times 110 \times 45 \text{ mm}$ $2.80 \times 4.33 \times 1.78 \text{ in}$

Power ~ 2.4 mW

Supported 10/100/1000BASE-T Interfaces

Of End Devices 8000+



MOD™ ADAPTER PERFORMANCE SPECS



Mass ~ 29g

Dimensions $39 \times 53 \times 8.6 \text{ mm}$ $1.54 \times 2.09 \times 0.34 \text{ in}$

Power ~ 0.77 mW Per Device

Supported RS-232 RS-422 RS-Interfaces 485 I2C SPI *

*others by request





PERFORMANCE SPECS

Wireless Standard

802.11ah (Wifi HaLow)

Operational Frequency

900-930 MHz

Bandwidth	Channel Sizes	Throughput Max
	[MHz]	[Mb/s]
1 Spatial Stream	1	4.0
MIMO Capable	2	8.67
	4	20.0
	8	43.3
	16	86.7

Security Protocols

WPA2 // WPA3-SAE // WPA3-OWE

JOIN THE WAITLIST

Go to this link and apply online.

modularityspace.com/contact/