

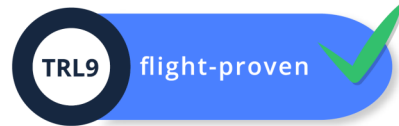


S band diplexer

for CubeSat nanosatellites applications

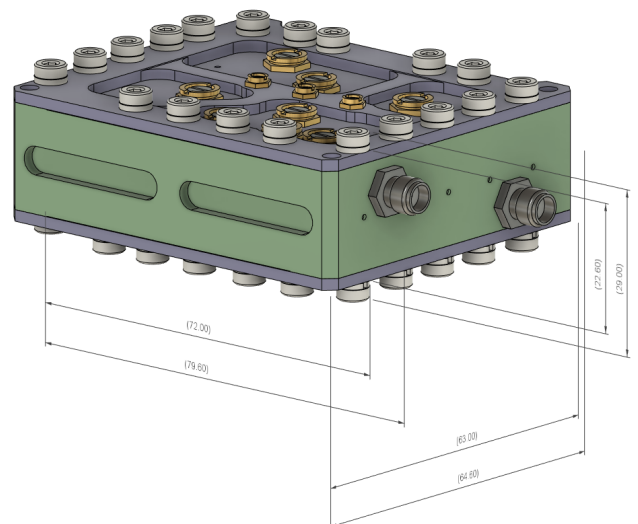
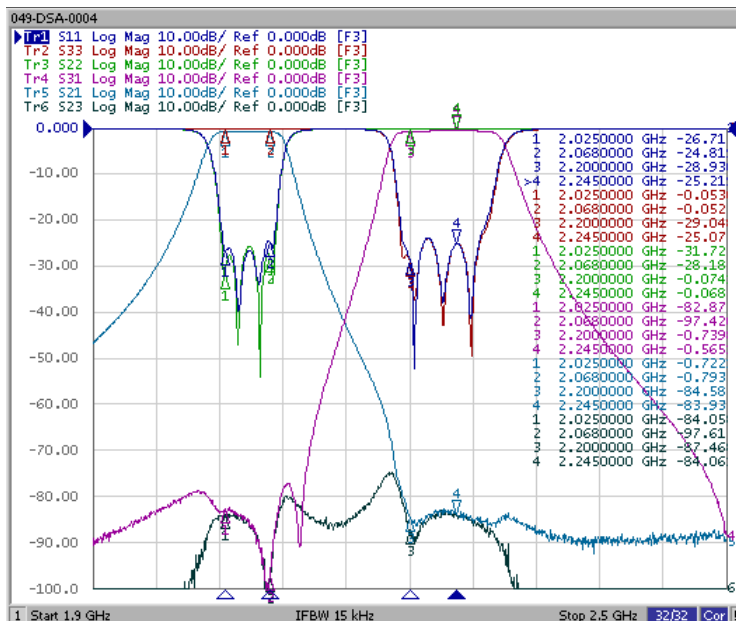
ABOUT

WiRan S band diplexers provide full-duplex communication for data transmission and TM&TC using a single antenna. They are designed to operate in 2025-2290 MHz range.



FEATURES

- compliant with the CubeSat nanosatellite standard
- provides high isolation between RX & TX bands
- durable, mechanical-shock- and temperature-resistant aluminium housing
- fully compatible with WiRan S band antenna
- two variants (A and B) available covering the entire 2025-2290 MHz range, no need for tuning based on channel allocation



S-Parameters available on request

WiRan Sp. z o.o.

Pomeranian Science and Technology Park, al. Zwycięstwa 96/98

81 - 451 Gdynia, Poland

+48 58 663 10 10

info@wiran.pl, www.wiran.pl



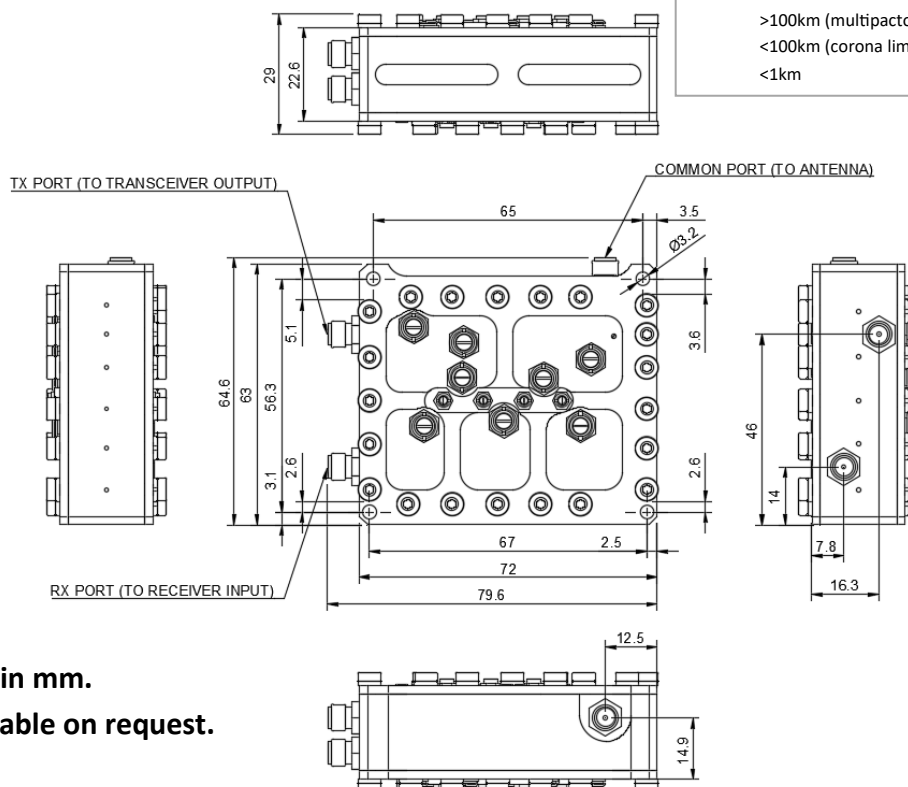
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Parameter	DSA	DSB	unit
RX frequency range (UL)	2025-2068	2067-2110	MHz
TX frequency range (DL)	2200-2245	2245-2290	MHz
Isolation in TX and RX	Min. >75, typical 80		dB
Insertion Loss at TX _{f_{center}} /f _{edge}	Max. 1,1,2; typical 0,7/0,8		dB
Insertion Loss at RX _{f_{center}} /f _{edge}	Max. 1,2/1,5; typical 0,7/0,9		dB
Return Loss (all ports)	Min. >19; typical 22		dB
Power handling	2.5*		W
Operating temperature range	-40 ÷ +75		°C
Weight	220		g
Maximum X/Y linear dimension [including connectors]	80		mm
Maximum height Z	29		mm
RF interface	SMA female connectors		

* for altitudes:

>100km (multipactor limited)	2.5W
<100km (corona limited)	0.5W
<1km	>20W



All values in mm.

STEP available on request.

Ordering code	Description
DSA	Variant for 2025-2068 MHz & 2200-2245 MHz
DSB	Variant for 2067-2110 MHz & 2245-2290 MHz

