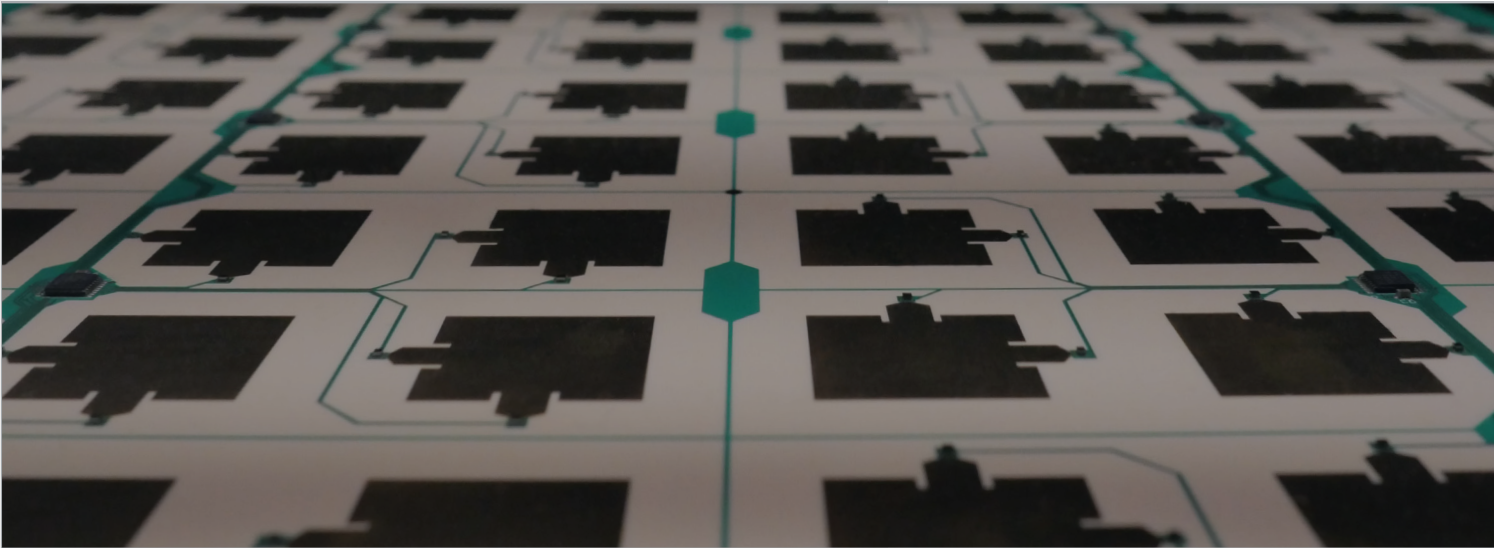


# RECONFIGURABLE INTELLIGENT SURFACES (RIS)

## FR1 BAND SPECSHEET



### DESCRIPTION

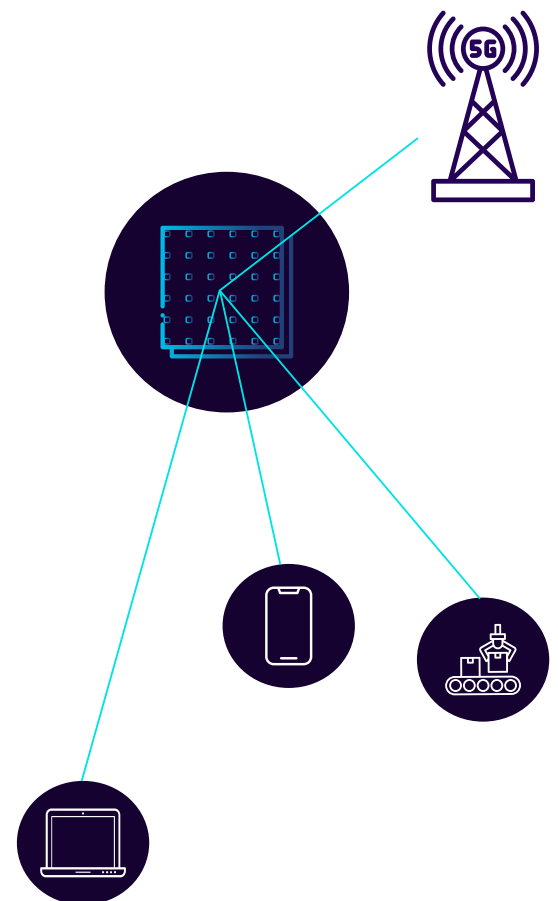
RIS is a software-defined connectivity enhancement solution for indoor & outdoor environments. It allows for passive control of reflected waves, redirecting signals toward the user as a relay of base stations.

### APPLICATIONS

- . 4.0 industrial sites
- . Major events or gatherings
- . Transportation hubs
- . Large infrastructures
- . Urban white spots
- . Secured connectivity for sensible buildings

### PRODUCT OFFER

- . RIS hardware for FR1 400 mm \* 400 mm \* 40 mm
- . Control software: Python library
- . Casing
- . Optional: tiling of up to 4 RIS (Large Intelligent Surface)



FOR R&D PURPOSE ONLY

## EFFICIENCY

Expanded coverage to wipe out indoor & outdoor blind spots, without signal noise generation

## FRUGALITY

Ultra-low energy consumption to reduce total cost of ownership & improve environmental performance

## ADAPTABILITY

Easy integration, agnostic of base station vendor, fitting any environmental configuration

PARAMETER	VALUE
Supply Voltage	5VDC/200mA (USB), Barrel Jack 5.5mm/2.5mm
Operating Temperature (ambient)	5 ~ 40°C
Storage Temperature (ambient)	5 ~ 40°C
Operating Conditions	Any
Dimensions	400 mm * 400 mm * 40 mm
Weight (RIS only)	<600g
Interface	USB-c
Frequency Range of Operation	3.3-4.1GHz
Polarization	H-pol and V-pol
Scan Range (Azimuth, Elevation)	+/- 60°
RF Power Dissipation at Reflection, max	<1.5dB, average 1dB
RF Power Handling	Max 50w
Average Power Consumption (1 polarization / 2 polarizations)	<0.2W
Control Software	Python 3.8.5
Tiling Capability	Up to 4 panels

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