

# 5G-OTA Switch Unit

Mechanical SPDT for Over the Air Measurements



5G RF units combine 3 mechanical SPDT switches for 5G measurements, and are designed to toggle between different operational modes:

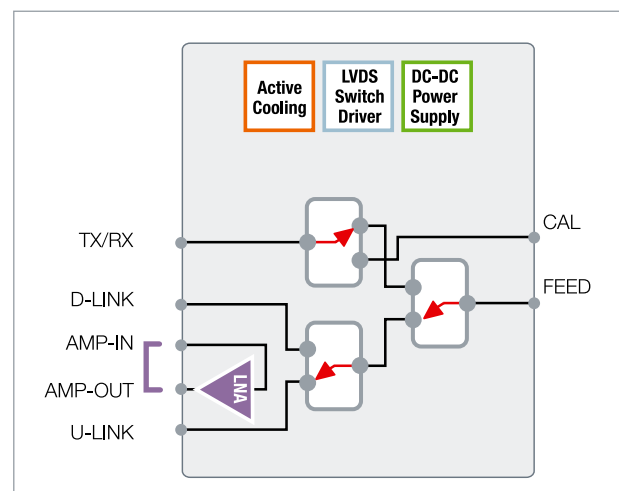
- Uplink /Downlink - RF signal can be amplified with internal ultra-broadband LNA 42 dB gain.
- Passive/Active antenna measurements modes
- Feed/Calibration mode

These RF units are designed to handle power levels up to 80 W at 6 GHz, and up to 10 W at 40 GHz, with a switching time of 10 ms (milliseconds).

## Main features

- Frequency range: 0.5-40 GHz
- Miniature mechanical outline
- Switching time of 10 ms typical
- Power handling of 80 W max at 6 GHz and 10 W max at 40 GHz (cold switching)
- LVDS control logic

## Functional Block Diagram



## Specifications

EXAMPLE MODEL	OFR-OTA40-1
Type	Mechanical SPDT switch, 0.5-40 GHz
Operation Frequencies	0.5-40 GHz
Switching Time	10 ms
Unit Insertion Loss	6 dB typical
Power Handling	80 W max at 6 GHz ; 10 W max at 40 GHz
Switch Isolation	<ul style="list-style-type: none"><li>• 70 dB min (DC-6 GHz)</li><li>• 60 dB min (6-18 GHz)</li><li>• 55 dB min (18-26.5 GHz)</li><li>• 50 dB min (26.5-40 GHz)</li></ul>
VSWR	1.3:1 dB typical (DC-6 GHz) 1.4:1 dB typical (6-18 GHz) 1.7:1 dB typical (18-26.5 GHz) 1.9:1 dB typical (26.5-40 GHz)
Amplifier Gain	42 dB typical
Connectors	2.92 mm (F)
Power Supply	24 V DC, 0.7 A max

## Model index for 5G-OTA RF switching unit

PART NUMBER	FREQUENCY BAND	DESCRIPTION
OFR-OTA40-1	0.5-40 GHz	RF box combined with 3 mechanical SPDT for 5G measurements



Contact your local sales representative for more information  
[salesteam@mvg-world.com](mailto:salesteam@mvg-world.com)  
[www.mvg-world.com](http://www.mvg-world.com)