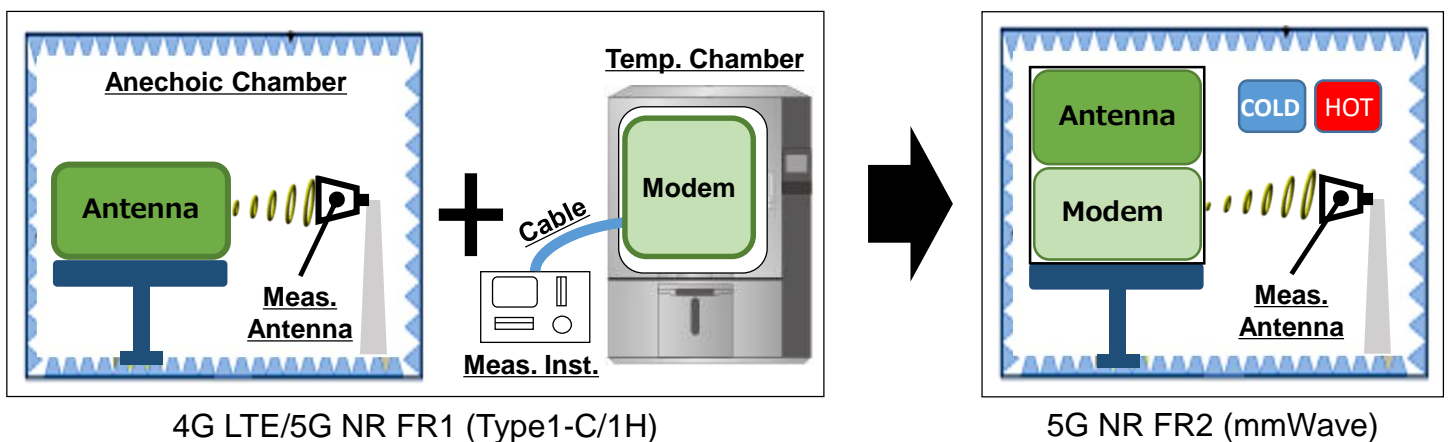
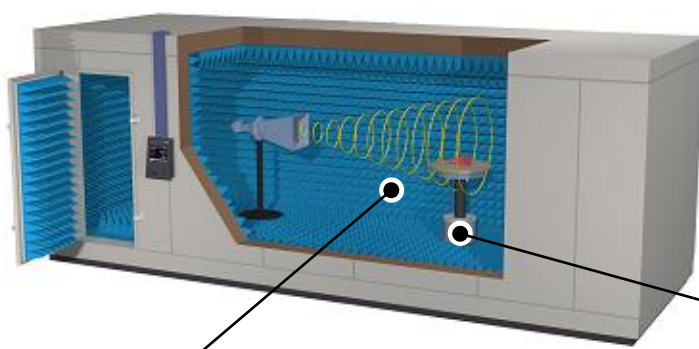


Chambers optimized for reliability assessment and OTA testing under temperature conditions of mmWave antennas and 5G terminals

In the mmWave band of 5G, the antenna and modem are integrated to reduce transmission loss. This design change requires performance evaluation in OTA or Over The Air. OTA asks for leak prevention, limiting the influence on surrounding. Also, ESPEC allows you to perform tests under temperature conditions that these devices are exposed to during transportation and during use.



Temperature-controlled anechoic chamber with turntable

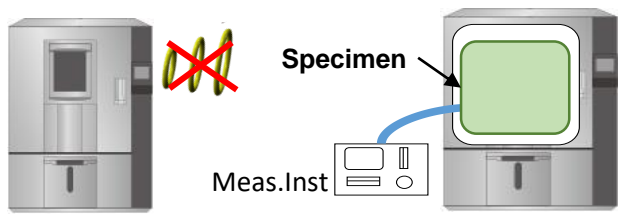


Temp. Range	-40 to +100C
Frequency Range	0.5 to 30 GHz
Attenuation	60dB or more
Internal Dimensions WHD (mm)	14,000 3,000 7,000

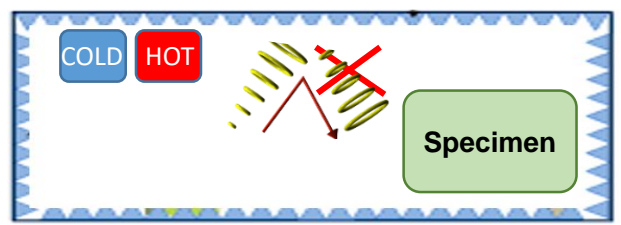
Accurately temperature-controlled anechoic chamber

Espec's unique thermal control technology prevents condensations in the test area, allowing the maneuver of turntable and positioner under low-temperature conditions.

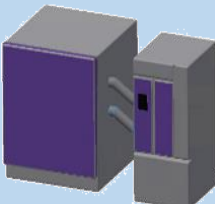




Chambers for high-frequency evaluation



Shielded chamber to prevent unwanted leak.




Anechoic chamber to prevent reflection.

Chamber Type	Anechoic Box + Conditioned Air Supply Unit	Shield Chamber	Shield Chamber High Shield	Benchtop w/ shield option	Anechoic Chamber
Appearance					
Frequency Range	0.5 to 30GHz	1. 0.7 to 2.4GHz 2. 2.4 to 4.0GHz 3. 4.0 to 6.0GHz	0.5 to 6GHz	4GHz,6GHz	※Please contact us
Attenuation	60dB or more	1. 45dB or more 2. 50dB or more 3. 60dB or more	70dB or more	40dB or more	
Temperature Range	-40 to +100C	-40 to +100C	-40 to +100C	-40 to +100C	-40 to +100C
Internal Dimensions (WHD) mm	1200 x 1200 x 1200	600 x 850 x 770 (PUSH-3)	465 x 640 x 645 (PUSHH-3)	400 x 400 x 400 (SU-642)	300 x 550 x 500 (PUAN-3)

Chamber for temperature, humidity and altitude (vacuum)

The 5G technology is expected to unleash a massive IoT (Internet of Things) ecosystem where networks can serve billions of connected devices' communication needs. This explosion of use will expose the devices to much wider, more severe, harsh environment not only extremes in temperature and humidity, but also pressure.

Model	VLC-201P/301P	
Temperature Range	-20 to +80C	
Pressure Range	93.3 to 10.1kPa	
Internal Dimensions WHD (mm)	201P: 560 x 560 x 509 301P: 800 x 800 x 709	

Chambers for thermal stress (internal/external)

Mobile devices and components used in such devices require a temperature cycle test. These chambers here not only capable of such tests, but also they can compensate the heat generated by the components during tests.

Model	AR Series		HR Series	
Temp. Range	-70 to +180C		-70 to +180C	
Ramp Rate	4 to 15C/min		20C/min, 25C/min	
Allowable Heat Load	9.5kW at 20C		30kW at 20C	
Capacity (L)	250 to 1100L		357 to 1800L	

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