

atenlab

# Shielding Enclosure System

EMC / OTA / RF Chamber turn-key solution

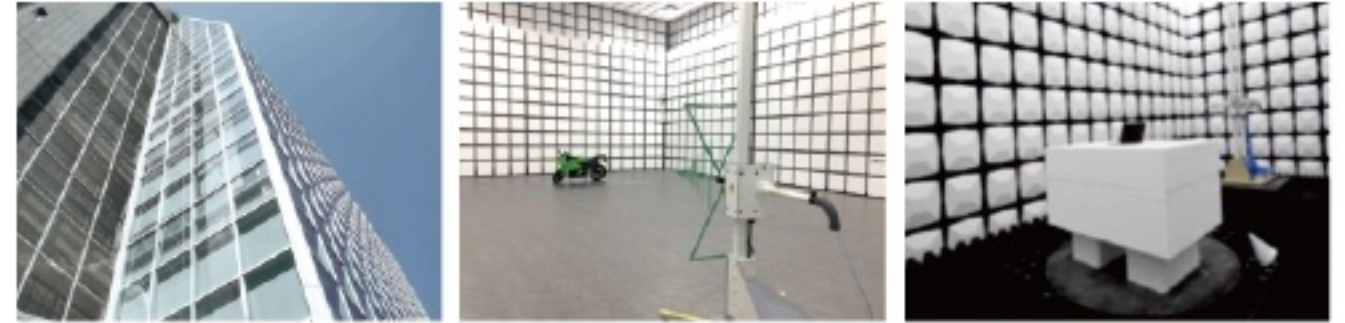


atenlab



[www.atenlab.com.tw](http://www.atenlab.com.tw)





Atenlab is an EMC system integrator leader in Taiwan, with more than 20 employees, we have installed over 100 sets, around the world. comprehensive solution for standard and customized EMC chamber , from designing , manufacturing and finally getting third party certification in the final stage.

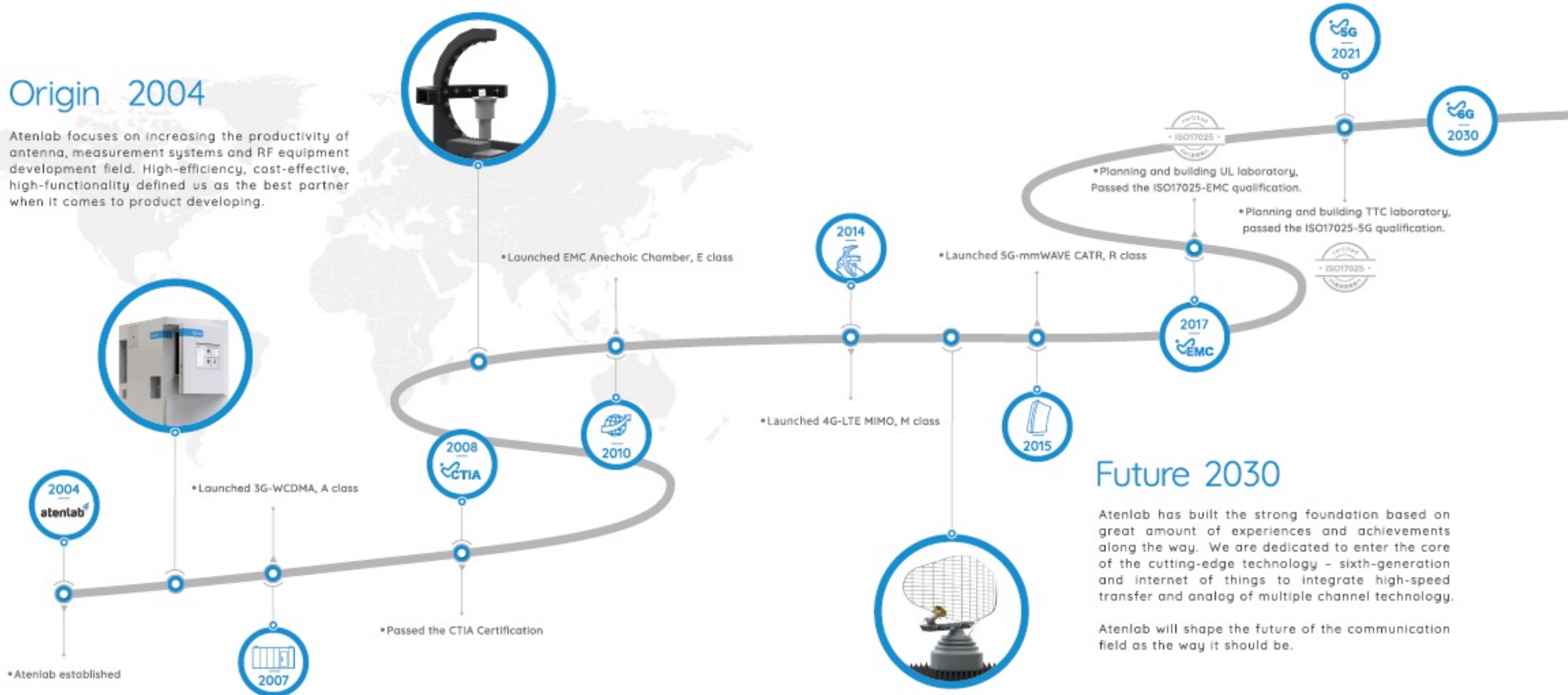
In addition, we provide system integration with high-quality performance equipment by cooperating with international brands, even becoming a distributor an agent in order to improve customers' user experience.

We consistently challenged ourselves and strive for improvement. Atenlab has been highly regarded by numerous finest electronics brands in Silicon Valley and Taiwan in multiple research and development fields, from automation equipment to wireless communication measurement system.

Our solution is fully compliance with requirements specified by [IEC61000-4-3](#), [CISPR12](#), [CISPR 25](#), [ISO 11452](#), [CISPR22](#), [CISPR11](#), [MIL-STD-461](#), [FCC part15](#), [FCC part18](#), [FCC part22](#), [FCC part24](#), [FCC part27](#), [IEC61000-4-3](#), [EN55024](#), [EN301489](#), [IEC61000-4-6](#), [EN55024\(BCI\)](#), [EN301489](#) etc.

## Origin 2004

Atenlab focuses on increasing the productivity of antenna, measurement systems and RF equipment development field. High-efficiency, cost-effective, high-functionality defined us as the best partner when it comes to product developing.



## Future 2030

Atenlab has built the strong foundation based on great amount of experiences and achievements along the way. We are dedicated to enter the core of the cutting-edge technology - sixth-generation and internet of things to integrate high-speed transfer and analog of multiple channel technology.

Atenlab will shape the future of the communication field as the way it should be.

# SE-R Shielding Room

- Painted on panel for protection and aesthetic
- Self-supporting structural frame supports shielding enclosure.
- Max floor loading up to 60 ton/m<sup>2</sup>



## SE-R3

R: Shielding Room

Type

- 1: Testing Shielding Room
- 2: OTA Shielding Room (Middle)
- 3: EMC Shielding Room
- 5: Bulkhead Shielding Room
- 7: Shielding Room Accessories
- 8: Special Shielding Room

Frequency(Hz)

Shielding Effective

9k-100k

≥ 60dB

100k-1M

≥ 80dB

1M-1G

≥ 100dB

1G-18G

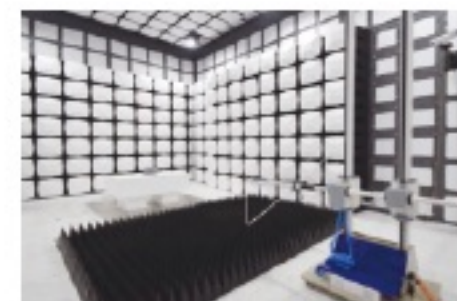
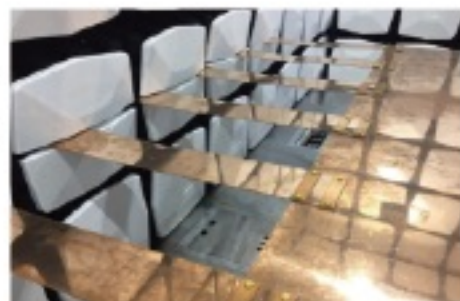
≥ 100dB

18G-40G

≥ 80dB

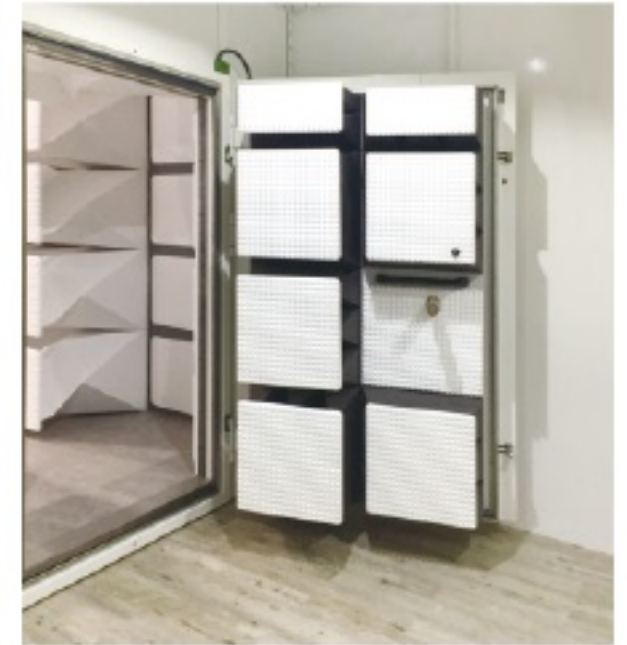
According to MIL-STD-285/IEEE-299

We provide the modulator-type panel for shielding enclosure construction. Every panel is in standard height of 2.5-3.0m, hot galvanized steel sheet, 2mm thickness, continuously canted. The galvanization has a thickness of approx. 20 microns on each modular panel.



## SE-D Shielding Door

- Varieties of swing type and sliding type
- Auto-latching to extend service life and convenience
- Manual operation in case of power outage



### SE-D3

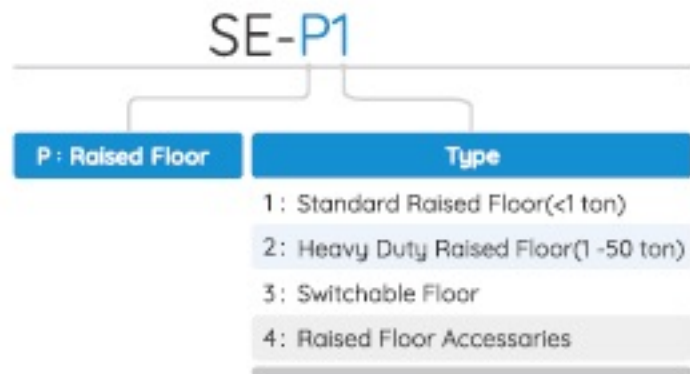
D : Shielding Door

Type

- 1: Manual Shielding Door
- 2: Auto-latching Flat Shielding Door
- 3: Auto-latching Shielding Door
- 5: Shielding Sliding Door
- 7: Shielding Door Accessories



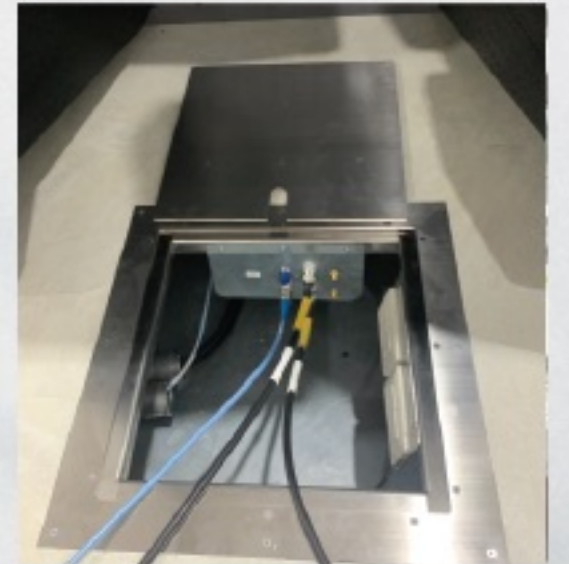
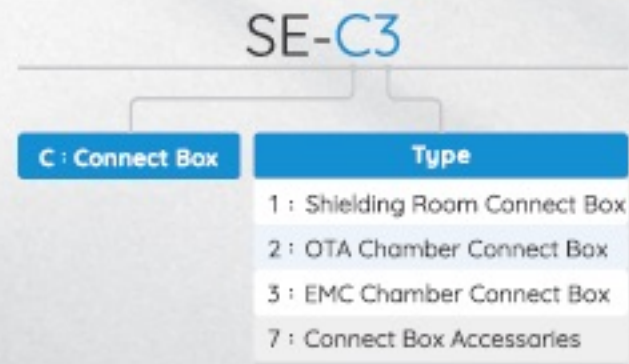
## SE-P Raised Floor



## SE-A Access Panel



## SE-C Connect Box



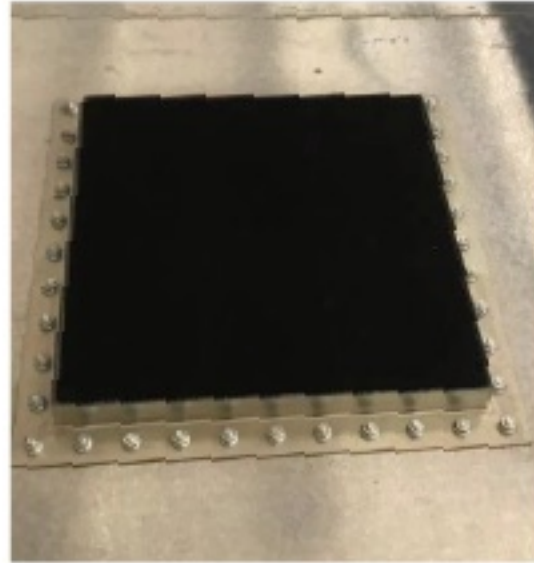
## SE-H Honeycomb

### SE-H2

H : Honeycomb

Type

- 1 : 8GHz Shielding Vent
- 2 : 18GHz Shielding Vent
- 3 : 50GHz Shielding Vent
- 4 : 100GHz Shielding Vent
- 7 : Shielding Vent Accessories



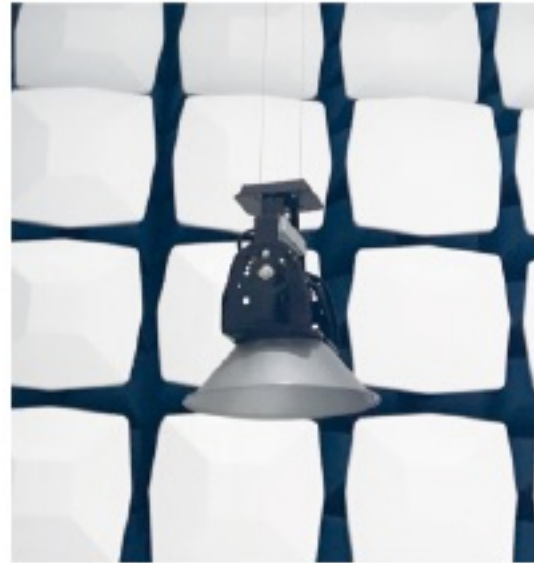
## SE-L Lighting

### SE-L2

L : Lighting

Type

- 1 : Low Noise LED Lighting
- 2 : Low Noise LED Lighting  
With Up/Down Lifting
- 3 : Lighting by Fiber
- 7 : Lighting Accessories



## SE-V CCTV System

### SE-V2

V : CCTV System

Type

- 1 : Standard CCTV System
- 2 : Low Noise CCTV System
- 3 : Immunity CCTV System  
Mobile mounting
- 7 : CCTV Accessories



## SE-F Shielding Filters



### SE-F1

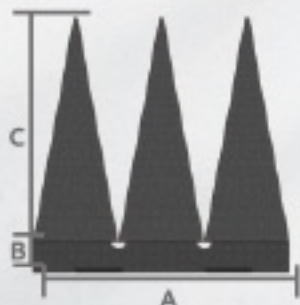
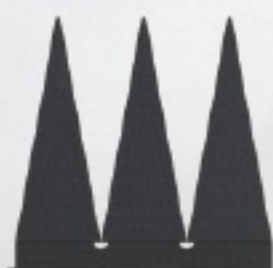
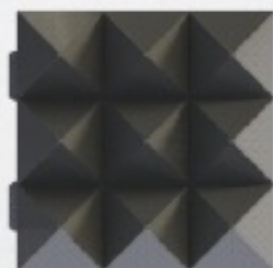
F: Shielding Filter	Type
	1: AC Single Phase Power Shielding Filter
	2: Signal Shielding Filter
	3: AC Three Phase Power Shielding Filter
	5: High Frequency AC Power Shielding Filter
	6: DC Power Shielding Filter
	7: Shielding Filter Accessories
	8: Special Shielding Filter
	9: Shielding Filter set

## SE-T Testing Table

### SE-T1

T: Testing Table	Type
	1: Low Dielectric Form Testing Table
	2: Wooden Testing Table
	3: Wooden Testing Table Cover Metal Plane
	6: Laboratory Furnitures
	7: Accessories





## AB-X2

X : EPP Broadband Absorber

Type

- 1: EPP Pyramid RF Absorber
- 2: EPP Pyramid EMI Absorber
- 5: EPP Flatten Absorber
- 6: EPP Bevel Absorber
- 7: EPP Walkway Absorber
- 9: EPP Absorber Set

## AB-X EPP Broadband Absorber

Item	Description	Reference
Operating temperature (°C)	-15°C to +60°C	IEC 60068-2-1
Humidity range (%)	30% to 70%	AATCC 30-IV
Power density susceptibility (V/m)	750	DO-160, IEC 61000-4-3
ESD susceptibility (kV)	16	IEC 61000-4-2
ISO dust-free (Class)	8, Class 100,000	ISO 14644-1, STD 209E
Waterproof rating	IPX5	IEC 60529
Fire-retardant performance	Compliance	UL94 HBF ISO 4589-2 NRL 8093 Tests 1 and 3
RoHS	Compliance	2015/863 (RoHS 2.0)
REACH	Compliance	EC 1907/2006

Unit : cm, ±10%

Model	Dimension(AxA)	Base height(B)	Cone Height(C)	Total height(B+C)	Number of cones
AB-X130	60 x 60	3	27	30	(6x6) 36
AB-X160	60 x 60	7	53	60	(3x3) 9

Unit : dB, ±10%

Model	0.3GHz	0.45GHz	0.8GHz	1GHz	3GHz	6GHz	10GHz	20GHz	40GHz
AB-X130	-6	-17	-25	-30	-40	-45	-48	-50	-50
AB-X160	-20	-28	-35	-40	-48	-48	-50	-50	-50

## AE-T EMC Turntable System

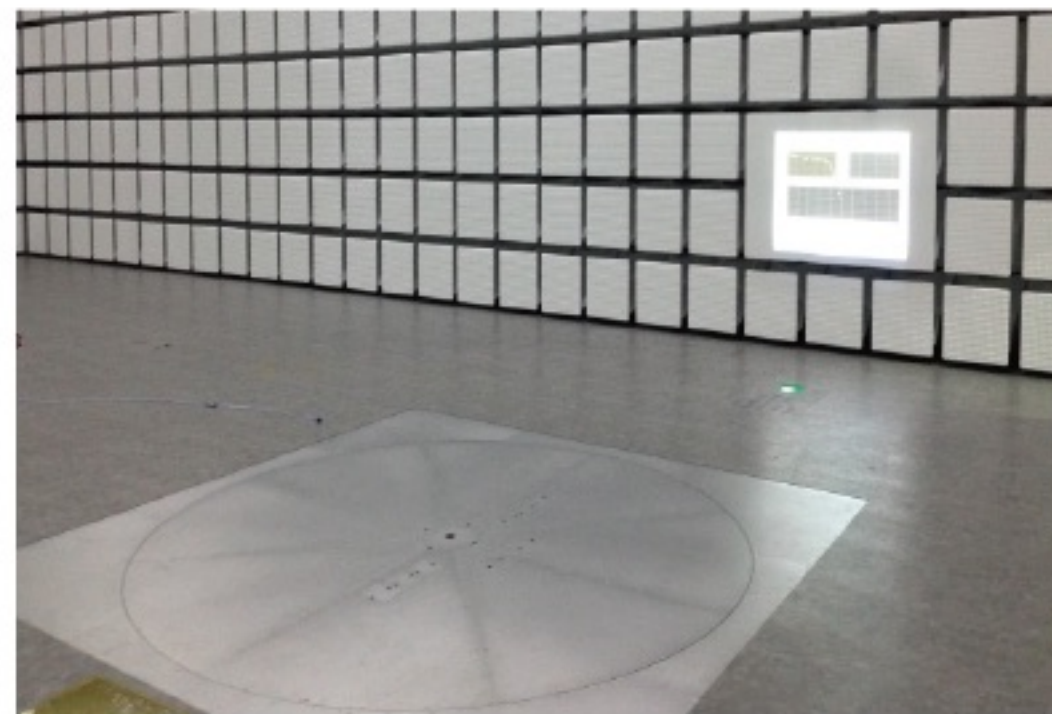
### AE-T1

T : EMC Turntable System

Type

- 1 : Antenna Tower
- 2 : Turntable

Item	Specification
Model	AE-T134
Scan type	Bore-sight
Scan Height	1.0-4.0 m
Position accuracy	+/-1cm
Max loading(Antenna)	10kg
Max.torque loading	10N-m
Scan speed	1-1.5 cm/sec
Rotating range	0-90°
Mobility	Movable with wheels
Meets ANSI C63.4 requirement	



## AE-T EMC Turntable System

### AE-T2

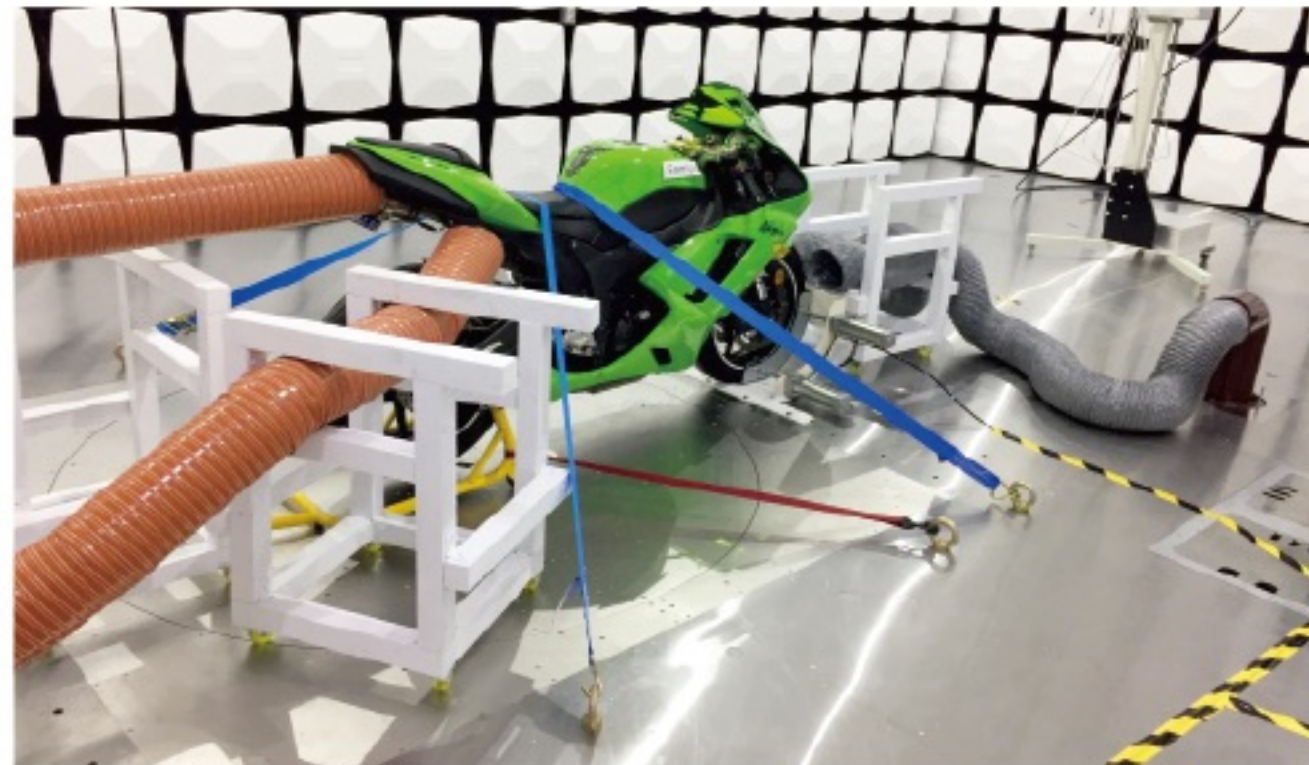
T : EMC Turntable System

Type

- 1 : Antenna Tower
- 2 : Turntable

Item	Specification
Model	AE-T222
Diameter	2.0 m
Max. loading	1000kg
Speed	2.0 RPM
Rotating range	-20° to 380°
Add-on	Piping hose
	Cable trucking

## Project Reference



## Project Reference

