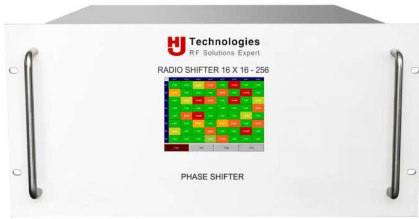


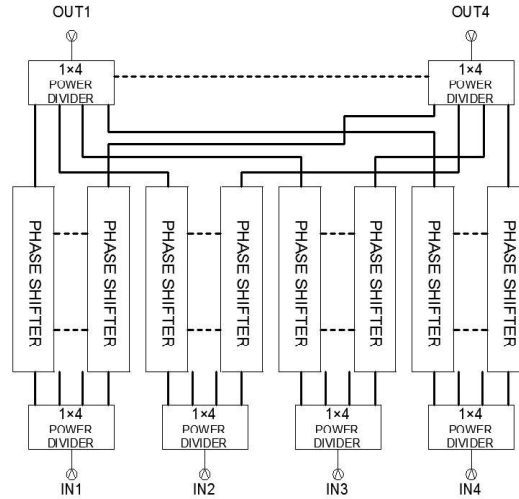
System Diagram:



Radio Shifter 16 x 4 - 64



Radio Shifter 16 x 16 - 256



Radio Shifter 4x4-16

Features:

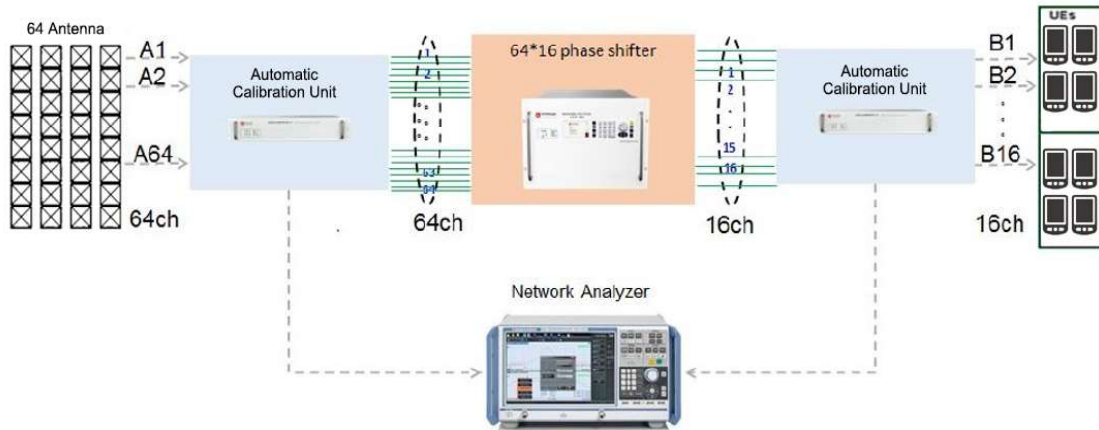
Radio Shifters are multi - channel digital phase shifters with high phase accuracy, low - phase - loss. Users may adjust phase shift with panel and LAN Ethernet ports on each channel. Radio Shifters are mainly used in the communications antenna and phase - controlled radar and other communication equipment.

Specification:

Specification	Description:
Frequency Range	2.3 GHz - 3.8 GHz / 3 GHz - 6 GHz
Impedance	50 Ω
Phase Shift Range	360 degree, 5.625 degree per step
Phase Shift Accuracy	±1.5% degree, RMS ±1 degree
VSWR (Avg.)	1.4
Insertion Loss	≤ 38 dB
Insertion Loss Accuracy	±1.5 dB
Input Power (Avg.)	+33 dBm
Power Supply	100 - 240 V _{AC} 50 - 60 Hz
Control Interface	RS - 232 and Ethernet
RF Connector	N (F)
Temperature Range	-10-50°C (14-122 °F)

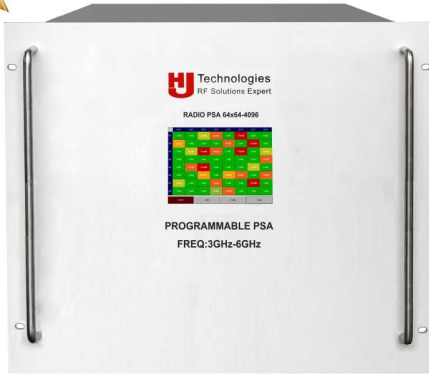
Radio Shifter Systems

Application:



Radio Shifter Systems products	Description:
Radio Shifter 4 - 220	4 independent phase shifters
Radio Shifter 8 - 220	8 independent phase shifters
Radio Shifter 2 x 2 - 4	2 x 2 matrix system containing 4 independent phase shifters
Radio Shifter 4 x 4 - 16	4 x 4 matrix system containing 16 independent phase shifters
Radio Shifter 4 x 8 - 32	4 x 8 matrix system containing 32 independent phase shifters
Radio Shifter 4 x 12 - 48	4 x 12 matrix system containing 48 independent phase shifters
Radio Shifter 6 x 6 - 36	6 x 6 matrix system containing 36 independent phase shifters
Radio Shifter 8 x 6 - 48	8 x 6 matrix system containing 48 independent phase shifters
Radio Shifter 8 x 8 - 64	8 x 8 matrix system containing 64 independent phase shifters
Radio Shifter 9 x 9 - 81	9 x 9 matrix system containing 81 independent phase shifters
Radio Shifter 16 x 4 - 64	16 x 4 matrix system containing 64 independent phase shifters
Radio Shifter 16 x 16 - 256	16 x 16 matrix system containing 256 independent phase shifters
Radio Shifter 32 x 8 - 256	32 x 8 matrix system containing 256 independent phase shifters
Radio Shifter 64 x 16 - 1024	64 x 16 matrix system containing 1024 independent phase shifters

Phase Shifter Attenuator



Radio PSA 64x64-4096

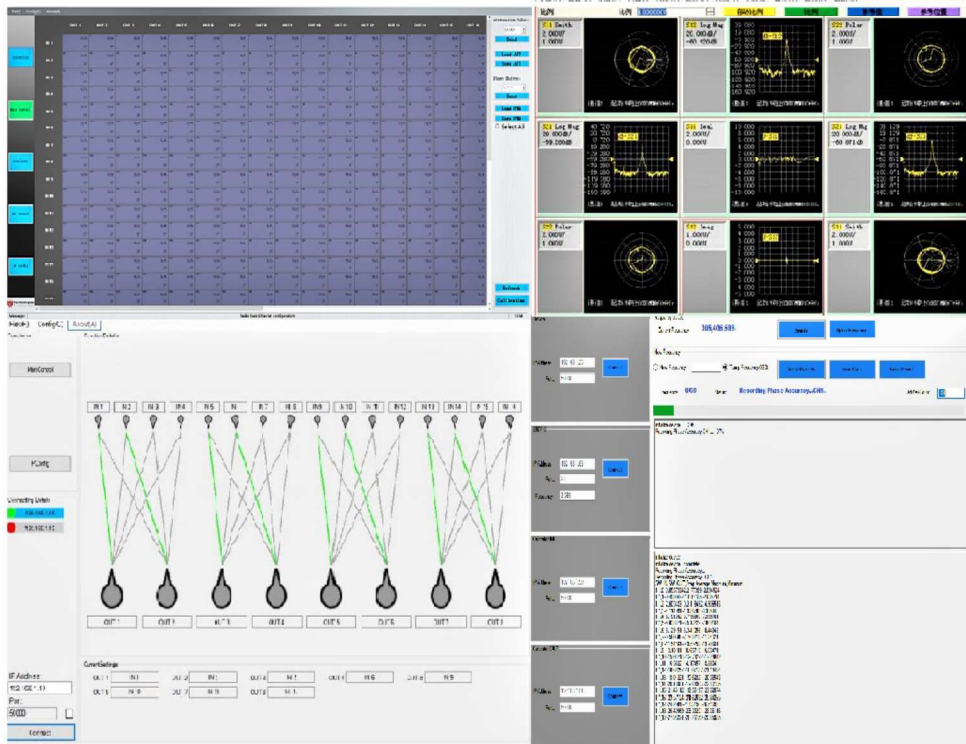
Software Feature:

- 1.GUI Interface** Easy to show all channels' phase and attenuation changes.
- 2.File load/save** With CSV files, all data and settings can be restored and recalled.
- 3.Dynamic Function** With BTS mapping and car routing, all phase settings and attenuation settings can be set.
- 4.Log monitor** All operations can be saved in files as logs.
- 5.Auto Calibrating** Simply connected with the Automatic calibrating system, all calibrating can be set automatically.

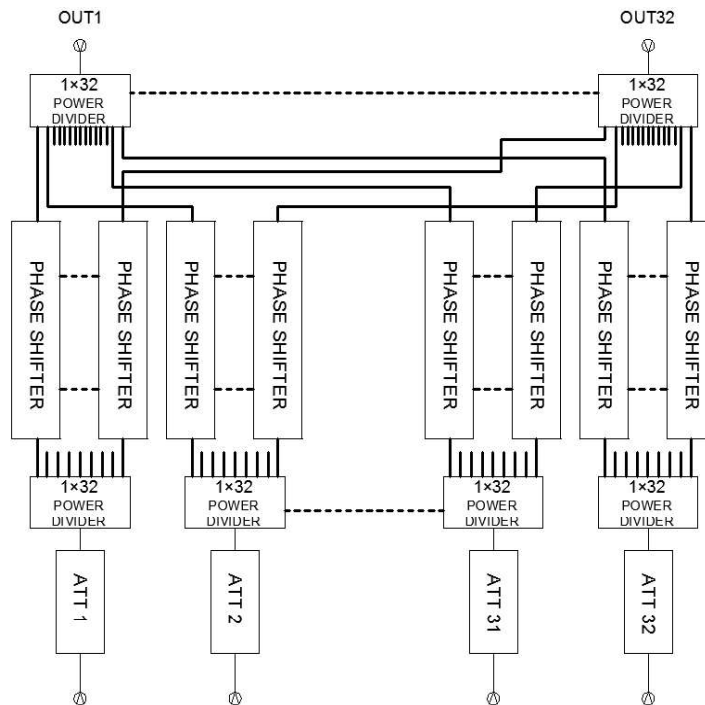
Specification	Description:	
Dimension	19', 16U 19', 16U	
Frequency Range	1.7 GHz - 2.9 GHz	3GHz - 6GHz
Phase Shift Range	360 degree, 2.8125/1.40625 degree per step (Optional 0.5 degree per step with 5 dB more insertion loss)	360 degree, 5.625 degree per step (Optional 2.8125/1.40625 degree per step with 4 dB more insertion loss)
Phase Shift Accuracy	±1.5 degree @1.7GHz– 2.6GHz ±2.4 degree @2.6GHz– 2.9GHz (±0.5 degree @1.7GHz–2.9GHz Optional)	±2.8125 degree @3.5GHz ±7 degree @4.5GHz (Optional ±2.8125 degree @4.5GHz) (Optional ±1.40625 degree @4.5GHz)
Attenuation Range	0~95dB, 0.25 dB Step	
Attenuation Accuracy	±0.15dB @0-31dB ±0.25dB @32-63dB ±1.5%dB @63-95dB	±0.15dB @0-31dB ±0.25dB @32-63dB ±1.5%dB @63-95dB
Insertion Loss	≤56dB @ 2.6GHz	≤60dB @ 5.8GHz
VSWR (Avg.)	<1.6	
Impedance	50 Ω	
Input Power (Avg.)	+ 33dBm	
Power Supply	100 - 240 V _{AC} 50 - 60 Hz	
Response time	10ms	
Control Interface	RS - 232, Ethernet and USB	
Display	Color 4.3 - inch HD Touch Display	
RF Input Connector	SMA(F)	
Temperature Range	-10-50°C (14-122 °F)	

Phase Shifter Attenuator

Software Interface:



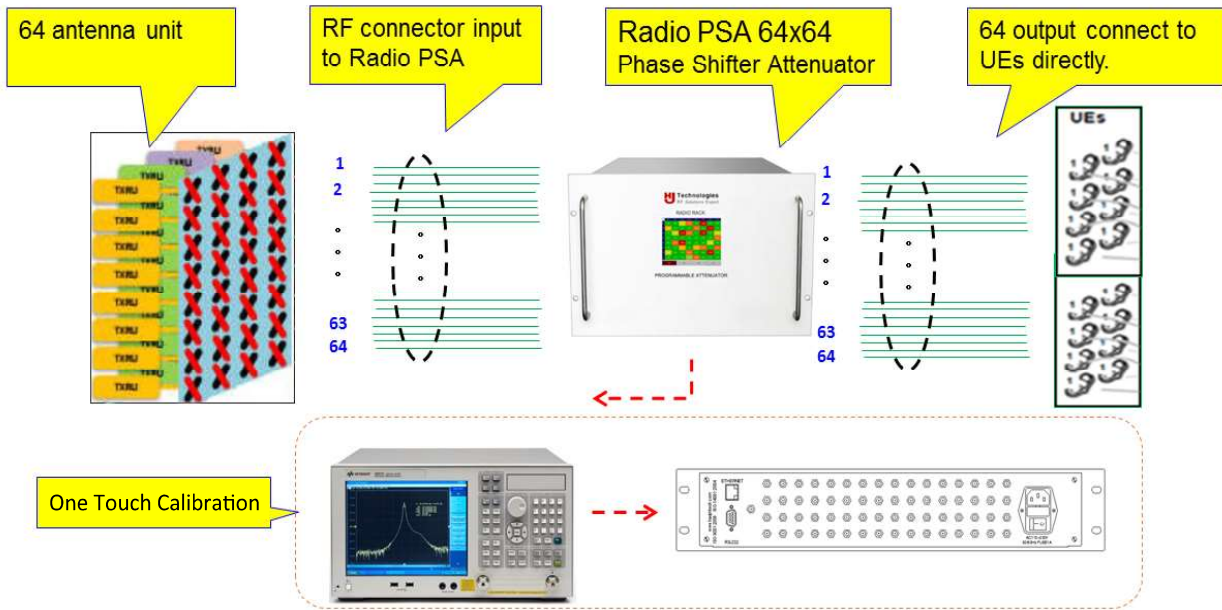
System Diagram



Radio PSA 64x64-4096

Phase Shifter Attenuator

Application:



Radio PSA Series products

Model	Freq	Accuracy	Model	Freq	Accuracy
16x4-64	1.7 GHz - 2.7 GHz	1.40625°±1.4°	32x32-1024	3GHz - 6GHz	5.625°±2.8°
16x4-64	1.7 GHz - 2.7 GHz	0.5°±0.5°	32x32-1024	3GHz - 6GHz	1.40625°±1.4°
16x4-64	3GHz - 6GHz	5.625°±5.6°	64x16-1024	1.7 GHz - 2.7 GHz	1.40625°±1.4°
16x4-64	3GHz - 6GHz	5.625°±2.8°	64x16-1024	1.7 GHz - 2.7 GHz	0.5°±0.5°
16x4-64	3GHz - 6GHz	1.40625°±1.4°	64x16-1024	3GHz - 6GHz	5.625°±5.6°
32x16	1.7 GHz - 2.7 GHz	1.40625°±1.4°	64x16-1024	3GHz - 6GHz	5.625°±2.8°
32x16-512	1.7 GHz - 2.7 GHz	0.5°±0.5°	64x16-1024	3GHz - 6GHz	1.40625°±1.4°
32x16-512	3GHz - 6GHz	5.625°±5.6°	64x32-2048	1.7 GHz - 2.7 GHz	1.40625°±1.4°
32x16-512	3GHz - 6GHz	5.625°±2.8°	64x32-2048	1.7 GHz - 2.7 GHz	0.5°±0.5°
32x16-512	3GHz - 6GHz	1.40625°±1.4°	64x32-2048	3GHz - 6GHz	5.625°±5.6°
32x32-1024	1.7 GHz - 2.7 GHz	1.40625°±1.4°	64x32-2048	3GHz - 6GHz	5.625°±2.8°
32x32-1024	1.7 GHz - 2.7 GHz	0.5°±0.5°	64x32-2048	3GHz - 6GHz	1.40625°±1.4°
32x32-1024	3GHz - 6GHz	5.625°±5.6°	Other needs please contact sales		