

	Transcom	Keysight	R&S	R&S	Protek
Product Model	T5260A/T5240A	E5071C	R&S ZVA8	R&S ZND	A333/A338
Impedance	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω
Test Port Connector	N-type, female	N-type, female	N-type, female	N-type, female	N-type, female
Number of Test Ports	2	2	2	2	2
Frequency range	T5260A : 500 kHz to 6.5 GHz T5240A : 500 kHz to 4.5 GHz	300 KHz - 4.5/6.5/8.5 GHz	300kHz - 8.0GHz	100kHz - 4.5 / 8.5 GHz	100kHz - 3.2 / 8 GHz
Full CW Frequency Accuracy	±5 ppm	±7 ppm		±5×10 ⁻⁷	±5×10 ⁻⁶
Frequency Resolution	1Hz	1Hz	1Hz	1Hz	1Hz
Number of Measurement Points	2 ~ 10001	2 ~ 20001	1 to 60001	2 to 5001	1 to 200,001 / 500,001
Measurement Bandwidths	1Hz to 50kHz	10 Hz to 1.5 MHz	1 Hz to 1 MHz (1/2/5 steps)	1 Hz to 300 KHz	1 Hz to 300 KHz
Dynamic Range	117dB, typ. 121dB	117 dB, typ. 124	100dB, typ.140dB	120dB, typ.130dB	120dB
Measurement Parameters	S11, S21, S12, S22	S11, S21, S12, S22	S11, S21, S12, S22	S11, S21, S12, S22	S11, S21, S12, S22
Effective Directivity	42 dB	38 - 46 dB	> 46 dB, typ. 50 dB	45 dB	
Effective Load Match	42 dB	37 - 46 dB	> 46 dB, typ. 50 dB	45 dB	
Measurement Speed					
Measurement Time Per Point	120 us	100 us		10 us	125 us
Test Port Output					
Power Range	- 50 dBm to +5 dBm	- 55 dBm to +7 dBm	-40 dBm to +10 dBm, typ. -45 to +13 -40 dBm to +8 dBm, typ. -45 to +12	- 45 to +3 dBm	- 55 to +10 dBm
Power Accuracy	±1.5dB	± 1.5 dB	< 2 dB	< 2 dB	± 1 dB
Power Resolution	0.05 dB	0.05 dB	0.01 dB	0.01 dB	
Test Port Input					
Damage Level	23 dBm	+26dBm	+27 dBm	+27 dBm	
Damage DC Voltage	+35 V	±35 VDC	30 V	30 V	
Match (W/O System Error Correction)	18 dB	9 to 20 dB			
General Data					
Display	12.1 inch TFT color LED, touch screen	10.4 inch TFT color LCD, touch screen	26 cm (10.4") diagonal color LCD	12.1 inch color LCD, touch screen	10.4 inch TFT Color LCD (Touch Screen)
External Trigger Input Connector	BNC female, Input level range: 0 to +5	BNC female, Input level range: 0 to +5	BNC female, Input level range: 3 V	BNC female, Input level range: 3 V	
External Reference Input	BNC female; 10 MHz; 2 dBm ± 2 dB	BNC female; 10 MHz; -3 to +10 dBm	BNC female; 10 MHz; -5 to +10 dBm	BNC female; 20 MHz; -10 to +15 dBm	
External Reference Output	BNC female; 10 MHz; 2 dBm ± 2 dB	BNC female; 10 MHz; 0 dBm ±3dB	BNC female; 10 MHz; -5 to +10 dBm	BNC female; 10 MHz; +9 dBm	
VGA Video Output 15-pin mini	D-Sub; female; driving the VGA compatible monitors	D-Sub; female; driving the VGA compatible monitors		D-Sub; female; driving the VGA compatible monitors	D-Sub; female; driving the VGA compatible monitors
USB Connector Female	connection to printer, ECal module, USB storage	connection to printer, ECal module, USB storage		connection to printer, ECal module, USB storage	connection to printer, ECal module, USB storage
LAN Connector	10/100/1000 Base T Ethernet, 8-pin	10/100/1000 Base T Ethernet, 8-pin	10/100/1000 Base T Ethernet, 8-pin	10/100/1000 Base T Ethernet, 8-pin	10/100/1000 Base T Ethernet, 8-pin
Operating Temperature Range	+5° C ~ +40° C	+5° C ~ +40° C	+5° C to +40° C	+5° C to +40° C	+5° C to +40° C
Storage Temperature Range	-45° C ~ +55° C	-20° C to +60° C	-40° C to +70° C	-20° C to +60° C	-20° C to +60° C
Humidity	90% (25° C)	80 % rel. humidity(+29° C)	95 % rel. humidity(+40° C)	85 % rel. humidity(+40° C)	90 % rel. humidity(+25° C)
Calibration Interval	3 yr	1 Yr	1 Yr	1 Yr	1 Yr
Power Supply	220 ± 22 V (AC), 50 Hz	220 ± 22 V (AC), 50 Hz	100 V to 240 V (AC)	100 V to 240 V (AC)	100 V to 240 V (AC)
Power Consumption	60W		450 W	300 W	50 W
Dimensions (W × H × D) mm	440 × 231 × 360	426 × 222 × 416	465.1 × 286.2 × 495.0	462.5 mm × 239.6 mm × 361.5 mm	320 mm × 439 mm × 220 mm
Weight	15.5 kg	18.9 Kg	25 Kg	19 Kg	10 Kg
Warmup Time	40 min	90 Min			

	Transcom	Anritsu
Product Model	T5240A	MS2024B
Type of VNA	2 Path 2 Port VNA	1 Path 2 Port VNA
Impedance	50 Ω	50 Ω
Test Port Connector	N-type, female	N-type, female
Number of Test Ports	2	2
Frequency range	500 kHz to 4 GHz	500kHz - 4 GHz
Frequency Resolution	1Hz	1Hz
Number of Measurement Points	2 ~ 10001	2 to 4001
Measurement Bandwidths	1Hz to 50kHz	100 KHz
Dynamic Range	117dB, typ. 121dB	100dB
Measurement Parameters	S11, S21, S12, S22	S11, S21
Effective Directivity	42 dB	42 dB
Sweep Type	Continiuos, Single	Continiuos, Single
Number of Markers	15	12
Number of Traces	16	4
Graph Types	Log Magnitude, SWR, Phase, Real, Imaginary, Group Delay, Smith Chart, Log Mag/2 (1-Port Cable Loss), Linear Polar, Log Polar, Real Impedance, Imaginary Impedance	Log Magnitude, SWR, Phase, Real, Imaginary, Group Delay, Smith Chart, Log Mag/2 (1-Port Cable Loss), Linear Polar, Log Polar, Real Impedance, Imaginary Impedance
Marker Search	Max., Min., Peak, Marker Tracking, BW Search	Peak Search, Valley Search, Find Marker Value
Measurement Time Per Point	120 us	850 us
Power Range	- 50 dBm to +5 dBm	- 25 to +3 dBm
Calibration Type	1 Path 2 port, Full 2 port, Response (Open, Short, Load)	Full S11, 1-Path, 2-Port (S11 and S21), Response S11, Response S21
Calibration Methods	Short-Open-Load-Through (SOLT)	Short-Open-Load-Through (SOLT)
Calibration Interval	3 yr	1 Yr
Damage Level	23 dBm	23 dBm
General Data		
Display	11.4 inch TFT color LED, touch screen	8.4 in, daylight viewable color LCD
External Trigger Input Connector	BNC female, Input level range: 0 to +5 V	BNC, female, Maximum Input \pm 5 VDC
USB Connector Female	connection to printer, USB storage	connection to printer, ECal module, USB storage
LAN Connector	10/100/1000 Base T Ethernet, 8-pin	RJ45 connector for Ethernet 10/100-BaseT
Power Supply	220 \pm 22 V (AC), 50 Hz	Battery Operated

For 1 Path 2 port VNA DUT Needs to be physically reversed to take measurement on different ports but in 2 port 2 path VNA DUT Need not to be reversed phusically reversed we can make measurement on any port.