

Specifications		Descriptions		
Frequency	Tuning Range	9kHz to 26.5GHz		
		Range	Band	Harmonics(N)
		9kHz ~ 3GHz	0	1
		2.9GHz ~ 6.4GHz	1	1
		6.3GHz ~ 13GHz	2	2
	12.9GHz ~ 26.5GHz	3	4	
	Tuning Resolution	1Hz(Minimum)		
	Frequency Span Width	100Hz/div to Full Span		
	Span Accuracy	Start, stop, span manual selections		
	Readout Accuracy	±3% of the indicated Span Width		
	Frequency Counter	Span accuracy+Reference accuracy+50% of RBW		
	Resolution	1kHz, 100Hz, 10Hz, 1Hz		
	Accuracy	(Reference frequency error+counter resolution±1 count)		
	Sensitivity	≤-70dBm		
Stability				
Residual FM	≤100Hzp-p 200ms @1kHz RBW, 1kHz VBW			
Noise Sidebands	-90dBc/Hz+20log N for Frequency 3GHz @ 10kHz offset N=LO Harmonic Mixing Mode			
Amplitude	Measurement Range	+30dBm to displayed average noise level(RBW:1kHz, VBW:10Hz)		
	Displayed Average Noise Level	≤-105dBm, 50kHz to 100kHz		
		≤-110dBm, 100kHz to 2.8GHz		
		≤-105dBm, 2.8GHz to 3.0GHz		
		≤-115dBm, 3.0GHz to 13.2GHz		
		≤-100dBm, 13.2GHz to 26.5GHz		
		Pre-amplifier(option)		
		≤-115dBm, 50kHz to 50MHz		
		≤-130dBm, 50MHz to 1.8GHz		
	≤-129dBm, 1.8GHz to 3.0GHz			
	1dB Compression Point	-10dBm, 100kHz to 3.0GHz(0dB attenuation)		
		0dBm, 3~13.2GHz(0dB attenuation)		
	Display Scale	100dB in 10dB/div log scale		
		50dB in 5dB/div log scale		
		20dB in 2dB/div log scale		
		10 divisions with linear scale		
	Amplitude Units			
	Log Scale Mode	dBmV or dBm units		
	Linear Scale Mode	V(uV, mV, etc) or dBV(dBmV)		
	Quasi Peak Enabled	dBuV, dBmV or dBm		
	Display Linearity	5 or 10dB/div<±1.0dB over 10 divisions		
		1 or 2dB/div<±0.5dB over 10 divisions		
		Linear, <±3% of Reference Level over 10 divisions		
	Frequency Response	≤-3.0~+1dB, 9kHz to 5MHz		
		≤±1.0dB, 5MHz to 2.9GHz		
		≤±1.5dB, 3GHz to 6.4GHz		
		≤±2.2dB, 6.4GHz to 13.2GHz		
	≤±3.0dB, 13.2GHz to 26.5GHz			
	Attenuator			
	Range	0 to 55dB (Manual or Auto)		
	Resolution	5dB steps		
	Accuracy	±0.5 dB/±1dB peak-peak(50kHz to 26.5GHz)		
	Reference Level			
Accuracy	±1.5dB(50kHz to 13.2GHz)			
Range	-110dBm to +30dBm			
Resolution	0.1dB			
Residual Spurious	≤-85dBm(Input terminated, 0dB attenuation)			
Harmonic Distortion	≤-65dBc, -30dBm Input, 0dB attenuation			
Intermodulation Distortion	-70dBc, 100MHz to 26.5GHz			
Other Input Related Spurious	-65dBc, 1MHz to 100MHz, -30dBm Input, 0dB attenuation			
	-60dBc, 10mHz to 26.5GHz, -30dBm Input			
Resolution Bandwidth Selections	300Hz, 1kHz, 3kHz, 10kHz, 30kHz, 100kHz, 300kHz, 1MHz, 3MHz			
	9k, 120kHz : Quasi-Peak Detection(option)			
Accuracy	10Hz, 30Hz, 100Hz : D-RBW(option)			
	<±20%			
Selectivity	60dB/3dB ratio<15:1			
Switching Error	60dB/6dB ratio<12:1, 9kHz & 120kHz(Quasi Peak Option)			
Video Bandwidth Selection	<±1.0dB(3kHz Reference RBW)			
Sweep	Rate	10Hz to 1MHz in 1-3-10 steps plus None		
	Rate	20ms to 1000sec		
	Sweep Rate Accuracy	25us to 15sec (Zero span)		
	Trigger	<±10%, <100msec		
	Source	<±5%, for all other sweep rates		
	Modes	External(rear), Line, Video, Free run, TV trig(option)		
	Coupling	Continuous, Single		
	External Level(Rear)	DC		
Delay	TTL level			
	±1sweep time(zero span)			

Specifications		Descriptions
Memory	Trace Storage	Maximum 1,000 traces(*.TRC)
	Setup Storage	Maximum 2,000 states(*.STS)
	Image Storage	30~200 storage(*.BMP, *.JPG)
Display	Type	6.4" Color TFT LCD
	Digital Resolution	640H X 480V active display area
	Marker Modes	Peak search, Peak Track, Delta Marker, 1/Delta Marker shift, 9 Markers maximum
RF Input	Connector	N-type female, 2.92mm APC Type
	VSWR	150kHz to 3.0GHz, VSWR<1.5:1(with 10dB Input attenuation)
	Maximum Input level	±50VDC +30dBm
Output	IF Output	10.7MHz, swept signal
	Video Output	0~5VDC
	Swp Gate	TTL level(high level at sweep)
	VGA Out	External VGA Output(Color Output)
	Probe Power	3Pin(+15V, -12V, GND) connector
AM Demodulation	Demodulation Range	5% to 90% @1kHz, 50% modulation, -20dBm Input
	Input Level Range	-2.0dBm to -75dBm @1kHz, 50% modulation
	Frequency Response	20Hz to 30kHz @-20dBm Input
	Distortion	≤5% @90% modulation @1kHz, -20dBm Input ≤2% @50% modulation @1kHz, -20dBm Input
FM Demodulation	Demodulation Range	≤100kHz
	Input Level Range	-2.0dBm to -75dBm @50kHz deviation
	Frequency Response	20Hz to 100kHz @-20dBm Input
	Distortion	≤5% @20kHz deviation @ 1kHz, -20dBm Input ≤2% @50kHz deviation @ 1kHz, -20dBm Input
Quasi Peak Detector (option)	Band B Frequency Range	0.15MHz to 30MHz
	Charge Time	1ms
	Discharge Time	160ms
	Display Time	160ms
	Band C Frequency Range	30MHz to 100MHz
	Charge Time	1ms
	Discharge Time	550ms
Reference Frequency	Temperature Stability	±2ppm / ±0.2ppm(High Stability option)
	Aging	±1ppm/year / ±0.1ppm/year(High Stability option)
	Connector	BNC female connector
	Input Level	5dBm to +15dBm
	Output Level	+5dBm nominal
IEEE-488 (GPIB) Interface	Specifications	IEEE-Standard 488.1 - 1987, 488.2 - 1992
	Interface	SH1, AH1, T5, L3, SR1, RL1, PP0, DC1, DT1, C0 SR0, DC0, DT0, C1, C2, C3
RS-232C Interface	Type	Null Modem
	Baud Rate	600bps, 1200bps, 2400bps, 4800bps, 9600bps, 19.2kbps 38.4kbps, 57.6kbps, 115.2kbps
	Parity Check	Odd, Even or None, Mark, Space
	Data Length	7bits, 8bits
	Stop Bits	1bit, 2bit
	Protocol	None, Xon-Xoff, RTS-CTS, DTR-DSR
Print	Drivers	PCL3 or higher
	Connection	Standard 25Pin female D-Sub parallel printer
General Characteristics	Dimensions	350mm(W) X 185mm(H) X 381mm(D)
	Weight	11.8Kg
	Warm-up Time	15minutes for the accurate measurement
	Power Resources(standard)	
	Source Voltage & Frequency	90-250VAC 50/60Hz
	Power Consumption	90Watts maximum (without options)
	Fuse	
	F1 and F2	3.15A, 250V, Type T
	Environmental Specifications	
	Place	Indoors
	Operation Temperature	0 to 40℃
	Storage Temperature	-20 to 70℃
	Temperature / Humidity	MIL-T-28800E : Type 2, Class 5(Operating : 85%, Storage : 90%) MIL-T-28800 : Type 2, Class 5
	Vibration / Shock	Up to 3,000 meter(operation) Up to 40,000 feet(none-operation)]
	Altitude Limit	
	Safety Standard	EN61010-1:2001
	Main supply voltage fluctuations	Nominal voltage 10%
	Transient overvoltage	Installation Category II
	Pollution degree	2
RF emissions and immunity		
RF emissions	EN55011 : 1991, Class A	
RF Immunity	EN50082-1 : 1997	