

NS-30(Nex1 Spectrum Analyzer) Spec

Specifications		Descriptions
Frequency	Tuning Range	9kHz to 3.0GHz
	Tuning Resolution	1Hz(Minimum)
	Frequency Span Width	100Hz/div to Full Span
	Span Accuracy	±3% of the indicated Span Width
	Readout Accuracy	Span accuracy+Reference accuracy+50% of RBW
	Frequency Counter	
	Resolution	1kHz, 100Hz, 10Hz, 1Hz
	Accuracy	(Reference frequency error+counter resolution±1count)
	Sensitivity	≤-70dBm
	Stability	
	Residual FM	≤100Hzp-p 200ms @1kHz RBW, 1kHz VBW
		(p-p in 20ms)
Amplitude	Noise Sidebands	-90dBc/Hz @10kHz offset
	Measurement Range	+30dBm to displayed average noise level
	Displayed Average Noise Level	50kHz to 100kHz : -105dBm
		100kHz to 2.8GHz : -110dBm
		2.8GHz to 3.0GHz : -105dBm
		(1kHz RBW, 10Hz Video Filter)
		Pre-amplifier(option)
		50kHz to 50MHz : -95~-115dBm
		50MHz to 1.8GHz : -130dBm
	1dB Compression Point	1.8GHz to 3.0GHz : -129dBm
		(1kHz RBW, 10Hz Video Filter)
		-10dBm, 100kHz to 3.0GHz(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) pr 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, 10% of Reference Level over 10 divisions
	Frequency Response	≤-3.0~+1dB, 9kHz to 10MHz
		≤±1.5dB, 10MHz to 3.0GHz
	Attenuator	(10dB RF Attenuation)
	Range	0 to 50dB, Selected manually or automatically coupled to reference level
	Resolution	10dB steps
	Accuracy	0.5 dB/step up to 1.5dB maximum at 100MHz
	Reference Level	
	Accuracy	±1.5dB(50kHz to 3.0GHz)
	Range	-110dBm to +30dBm with 1kHz RBW using 1dB/div scale
	Resolution	0.1dB step minimum
	Residual Spurious	≤-85dBm(Input terminated, 0dB attenuation)
	Harmonic Distortion	≤-65dBc, -30dBm Input, 0dB attenuation
	Intermodulation Distortion	-70dBc, 100MHz to 3.0GHz, -30dBm Input, 0dB attenuation
		-65dBc, 1MHz to 100MHz, -30dBm Input, 0dB attenuation
	Resolution Bandwidth Selections	-60dBc, 10mHz to 3.0GHz, -30dBm Input
		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)
		<±1.0dB(3kHz Reference RBW)
	Video Bandwidth Selection	10Hz to 1MHz in 1-3-10 steps plus None
Sweep	Rate	20ms to 1000sec
		25us to 15sec (Zero span)
	Sweep Rate Accuracy	<±10%, <100msec
	Trigger	<±5%, for all other sweep rates
	Source	External(rear), Line, Video, Free run, TV trig(option)
	Modes	Continuous, Single
	Coupling	DC
Memory	External Level(Rear)	TTL level
	Delay	±1sweep time(zero span)
	Trace Storage	Maximum 1,000 traces(*.TRC)
	Setup Storage	Maximum 2,000 states(*.STS)
	Image Storage	30~200 storage(*.BMP, *.JPG)

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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, 50ohm nominal
	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	≤80kHz
	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
Frequency Standard (10MHz, Ref.)	Display Time	100ms
	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
IEEE-488 (GPIB) Interface	Output Level	+5dBm nominal
	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
	Parity Check	38.4kbps, 57.6kbps, 115.2kbps
	Data Length	Odd, Even or None, Mark, Space
	Stop Bits	7bits, 8bits
	Protocol	1bit, 2bit None, Xon-Xoff, RTS-CTS, DTR-DSR
Print	Drivers	PCL3 or higher
	Connection	Standard 25Pin female D-Sub parallel printer
General Characteristics	Power	HP 85024A compatible 3pins(+15V, -12V, GND)
	Dimensions	350mm(W) X 185mm(H) X 381mm(D)
	Weight	9.4Kg
	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%)
	Vibration / Shock	MIL-T-28800 : Type 2, Class 5
	Altitude Limit	Up to 3,000 meter(operation) Up to 40,000 feet(none-operation)]
	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