Technical Data



WATKINS-JOHNSON

May 1996

Signal Monitors





WJ-9205

WJ-9206

Description

WJ offers a variety of signal monitors operating on 21.4 MHz IF outputs to provide a wide range of monitoring and signal analysis capabilities. Many WJ signal monitors were designed to complement specific WJ receivers, but all work to advantage with other receivers.

Features

- ☐ High reliability
- ☐ Low-power consumption
- ☐ Virtually adjustment-free operation
- ☐ Small size
- ☐ Independent displays for multiple receivers

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All International sales of WJ equipment are subject to USA export license approval.

This material provides up-to-date general information on product performance and use. It is not contractual in nature, nor does it provide warranty of any kind.

Specifications

Specification	WJ-9205	WJ-9205-1	WJ-9206	WJ-9206-1		
Companion Unit	WJ-8615P or any receiver					
Inputs	3, BNC 1, IEEE-488 optional Note 2		3 IF, BNC 3 interfaces DB-15 1, power	4 IF,BNC 1 interfaces, DB-15		
Input Impedance	50W 1.5:1 VSWR		50W			
Input Center Frequency	21.4 MHz, ±2.5 MHz		21.4 MHz			
Maximum Input Level	+20 dBm, without damage					
Flatness of Response	± 1 dB					
Centering Control	Automatic		Front-panel Control			
Sweep Width	50 kHz to 5 MHz in 1-2-5 sequence		0 kHz to 5 MHz 5-2-1 sequence			
Sweep Linearity	10%					
Sweep Rate	Automatic 5 to 40 Hz variable		Hz variable			
Display Range	60-dB logarithmic, ±2 dB					
Intermediate Frequency	96.7 MHz, 10.7 MHz double conv.					
LO Frequency	118.1 ±, 2.5 MHz					
Resolution	10 kHz (3 dB) no 2nd resolution	ominal with optional	10 kHz (3 dB) nominal			
Sensitivity	-100 dBm input for minimum discernible signal					
3rd-order Intercept	+15 dBm, typical					
IF Rejection	80 dB, min 80 dB, typical		3, typical			

Specifications (Continued)

Specification	WJ-9205	WJ-9205-1	WJ-9206	WJ-9206-1	
Attenuation	0 to 70 dB in 10-dB steps				
Outputs	Note 1		2, X & Y axis, BNC	2, X & Y axis, 1 power, BNC	
Gain Control Range	See Attenuation (above)				
Marker	Centerline of gradicule		21.4 MHz Crystal-controlled		
Display	4-in CRT (10.16 cm)		4-in CRT (10.16 cm) P-31 Phosphor		
Front-panel Controls	Keypad Note 2		Rotary Switches		
Operating Temperature Range	0 to 50°C				
Power Input	115/230, Vac ±10 48 to 420 Hz	+28 Vdc nominal +20 Vdc, min +33 Vdc, max	115/230, Vac ±10% 48 to 420 Hz		
Power Consumption	50 W	45 W	38 W		
Input Power Ripple	N/A	±2 V peak, 1.0 Hz to 200 kHz	N/A		
Input Power Transient Tolerance	N/A	±15 V peak at 250 µsec, max width commutation & ignition peaks	N/A		
Vibration	N/A	MIL-STD-810D, Method 514.3, Procedure 1, Figure 514.3-25a (Propeller Aircraft Spectrum)	N/A		

Specifications (Continued)

Specification	WJ-9205	WJ-9205-1	WJ-9206	WJ-9206-1	
Height	3.5 in (8.89 cm)				
Width	8.25 in (20.96 cm)		8.5 in (21.59 cm)		
Depth	22 in (55.88 cm)		20 in (50.80 cm)		
Weight	18 lbs (8.15 kg)		17 lbs (7.69 cm)		

Note 1: Frequency span, display resolution, signal attenuation, sweep inversion, signal source

Note 2: If an operator desires detailed signal analysis, he/she may assign multiple traces to the same input source. With a broad frequency span assigned to one trace, an operator may view a wideband overview of the entire input spectrum (up to 5 MHz). If the operator sets the remaining traces for narrower frequency spans, he/she may obtain more detailed narrowband traces of any segment of the spectrum. In addition, the unit provides a 9-pin "D" connector at the rear panel for X and Y inputs, or to source X and Y outputs.