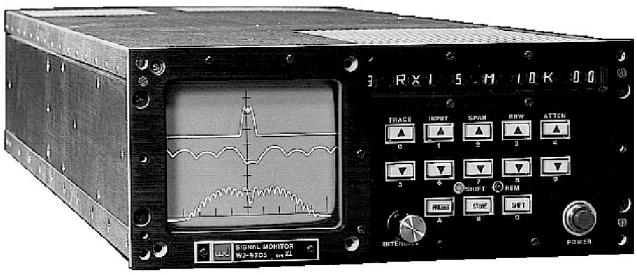
Technical Data

WATKINS-JOHNSON

May 1996

Signal Monitors

WJ-9206



WJ-9205

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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Printed in the U.S.A.

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	
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) nominal with optional 2nd resolution		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	

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.