

# Multiple Instrument Station Module

## Digital Storage Oscilloscope

### **Vertical**

Channels	2 + external trigger
Sampling rate	50MS/s (5GS/s ERS mode)
Bandwidth	> 100MHz
Coupling	AC, DC, GND
Input impedance	1M Ohm, 25pF
Vertical sensitivity	20mV to 2V per division
Vertical resolution	8 bits
Max. input voltage	100VDC

### **Horizontal**

Sweep speed	5ns/div to 5s/div
Memory	64kbytes/channel
Modes	normal, auto, single

### **Internal trigger**

Source	channel 1, channel 2, function generator
Slope	positive, negative
Sensitivity	< 0.5 divisions
Coupling	AC, DC, HF reject, LF reject

### **External trigger**

Input impedance	1M Ohm, 25pF
Slope	positive, negative
Sensitivity	< 10mV
Coupling	AC, DC, HF reject, LF reject
Max. input voltage	100V DC

### **Trigger delay**

Pre-trigger	0 to 100% of sweep time
Post-trigger	0 to 100% of sweep time

### **Measurements**

Automatic	standard waveform parameters
Comparison	time and voltage

## Function Generator

Waveforms	sine, square, triangle, single-shot pulse
Frequency range	0.1Hz to 10MHz, resolution 0.1% of range full scale
Pulse width	100ns to 10s
Modulation modes	AM, FM, PWM
Modulation frequency	400Hz internal
Duty cycle	20% to 80%, resolution 1%
Amplitude	0V to 5V, resolution 50mV
DC offset	-7.5V to 7.5V, resolution 50mV
Rise/fall time	25ns
Output impedance	50 Ohm

### **Sweep mode**

Start frequency	0.1Hz to 10MHz
End frequency	0.1Hz to 10MHz
Steps	1 to 1000
Time per step	0.1s to 9.9s

## Digital Floating Multimeter

Channels	2 channels
Input impedance	10M Ohm
Statistics	minimum, maximum, average

### **Channel 1**

Modes	DC volts, AC volts
Voltage range	0 to 400V
DC voltage resolution	0.005% full scale
DC voltage accuracy	+/-0.05%
AC voltage resolution	0.05% full scale
AC voltage accuracy	+/-0.1%

### **Channel 2**

Modes	DC volts, AC volts, DC current, AC current, resistance
Voltage range	0 to 400V
Current range	0 to 2A
Resistance range	0 to 20M Ohm
DC voltage resolution	0.005% full scale
DC voltage accuracy	+/-0.05%
AC voltage resolution	0.05% full scale
AC voltage accuracy	+/-0.1%
DC current resolution	1mA
DC current accuracy	+/-0.1%
AC current resolution	1mA
AC current accuracy	+/-0.2%
Resistance resolution	0.01% full scale
Resistance accuracy	+/-0.1%

## Auxiliary Power Supply

Output Voltages	+5V, +9V, -9V
Output Current	+5V supply - 500mA +9V supply - 100mA -9V supply - 100mA



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# Multiple Instrument Station (continued)

## Frequency Counter

Modes event, frequency, pulse width

### **Channel 1**

Impedance 50 Ohm  
Frequency range 1MHz to 150MHz  
Sensitivity < 5mV rms @ 2MHz to 10MHz  
< 15mV rms @ 10MHz to 100MHz  
Pulse response 50mV, 25ns pulse @ 500Hz  
Maximum input +/- 5V  
Basic accuracy +/- 0.02% +/- 1 count

### **Channel 2**

Impedance 1 MOhm  
Frequency range 2Hz to 100MHz  
Sensitivity < 300mV rms @ 10Hz  
< 150mV rms @ 10kHz to 10MHz  
< 350mV rms @ 33MHz  
Maximum input 200V rms  
Basic accuracy +/- 0.02% +/- 1 count

### **Event Mode**

Ch1 event count 0 to 9,999,999,999  
Ext gate width minimum 20ns  
Ext gate width time 6 hours, 10ms resolution  
10.74s, 5µs resolution  
84ms, 40ns resolution  
Statistics lowest, highest, average  
Display frequency, period, RPM events,  
pulse width, gate time

## Universal I/O

Number of channels 4 channels

### **Analogue Channels**

Modes voltage output, voltage input, current output,  
current input  
Voltage output range -9V to +9Vm resolution 10mV  
Voltage input range -10V to +10V, resolution 10mV  
Current output range 0 to +/-20mA, resolution µA

### **Digital Channels**

Modes logic output high, logic output low  
logic measurement  
Voltage TTL compatible logic levels

## Accessories

Output voltages 2 x DSO probes  
1 x yellow probe and cable  
1x blue probe and cable  
1x black probe and cable  
1x universal I/O cable (not terminated)

## Options

Internal fitting PCI Interface  
External fitting - MultiLink case (cost option) with USB  
- External case (cost option) which will hold up  
to 5 System8 modules (USB interface).

PC Requirements Pentium (1GHz) System  
Windows XP™  
20MB of free hard disk space  
256 MB RAM  
CD ROM Drive

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