



Features

- Powered by 10 to 36 Vdc
- 4, 8, 12, or 16 Channels Adjustable Case Size
- Airborne, Marine, and Offroad Applications
- Accepts Over 25 Different Validyne MC170 Signal Conditioning Modules

DESCRIPTION

The MC170-X Module Case is a new addition to Validyne Engineering's family of MC170 Signal Conditioning Products. Powered by any 10V to 36V DC power source, the unit accepts over 25 types of MC170 signal conditioning boards for measurement of Strain, Force, Vibration, Displacement, Pressure, Torque, RPM, and Temperature. Designed to be used for mobile applications with quick disconnect connectors and a carrying handle, this rugged module case is perfect for Marine, Aviation, and/or Offroad testing. The MC170-X is available in 4, 8, 12, and 16 channel configurations.

MEASUREMENT OF

- | | |
|----------------|----------|
| ▪ Pressure | ▪ Torque |
| ▪ Temperature | ▪ Force |
| ▪ Vibration | ▪ Flow |
| ▪ Displacement | ▪ Strain |

Specifications

Output Voltage:	±10Vdc, from signal conditioning plug-in modules.	
Power Requirements:	10 to 36 Vdc @ approximately 1 watt per plug-in channel.	
Internal Power:	15 volts rms @ 320 mA maximum.	
Carrier Power:	5 volts rms @ 3000 Hz, 2 watts maximum, for all sensors.	
Regulation:	Amplitude	Frequency
Load 0 to 100%	.05%	.1%
Input Volts 10 to 36	.01%	.01%
Temperature 0°F to 160°F	.01%/°F	.006%/°F

Size:

(4, 8, 12, or Channels)	Height	Width	Depth
MC170-X-04	3.45" X	6"	X 9.45"
-08	3.45" X	8"	X 9.45"
-12	3.45" X	10"	X 9.45"
-16	3.45" X	12"	X 9.45"

Approximate Weight:

	(includes signal conditioning modules)
MC170-X-04	6 lbs
-08	8 lbs
-12	10lbs
-16	12lbs

ORDERING INFORMATION

MODEL NO. MC170 - X - 04 - D - D

SLOTS	
04	4 SLOT
08	8 SLOT
12	12 SLOT
16	16 SLOT

INPUTS	
D	D SUB CONNECTOR

OUTPUTS	
D	D SUB CONNECTOR

ACCESSORY PART NUMBERS

	MATING CONNECTORS	
	"D" RIBBON CABLE	"D" ROUND CABLE
INPUT	N/A	12900 (9 PIN)
OUTPUT*	12901F (25 PIN)	12901R (PIN)

*NOTE: 12 & 16 slot module cases require two (2) mating output connectors.

SPARE DC POWER SUPPLY	12876
AC POWER ADAPTER	3000-4000
MOUNTING KIT	12883

PLUG-IN SIGNAL CONDITIONING CARDS FOR MC170-X

MODEL	DESCRIPTION	MODEL	DESCRIPTION
BA172	Dual Channel Buffer Amplifier	CD218	Carrier Demodulator
CD173	High Gain Carrier Demodulator		-1 Single Channel
	Linearizing Signal Conditioner for RTD		-2 Dual Channel
	-1 for 100 Ohm Platinum per IPTS-68	FC268	Frequency-to-Voltage Converter
	-2 for 50 Ohm Nickel	TC292	Thermocouple Amplifier
	-3 for 100 Ohm Platinum per DIN 43760	AL293-X	Alarm/Control Module
PA175	Piezoelectric Transducer Signal Conditioner		-1 with Hi/Lo Logic Alarm Outputs
	Carrier Demodulator, Alarm/Control Unit		-2 with Relay Output, Lo Alarm Only
	with Hi/Lo Logic Alarm Outputs		-3 with Relay Output, Hi Alarm Only
	-A with relay Output, Hi Alarm Only		-4 with Relay Output, Hi and Lo Alarm
	-B with relay Output, Lo Alarm Only	SG297	Strain Gage Conditioner
	-AB with relay Outputs, Hi and Lo Alarms	SR302	Square Root Extractor
PC202	Potentiometric Transducer Signal	BA332-150	High Common-Mode Buffer Amplifier
	Conditioner	TC387	Isolated Thermocouple Conditioner
BA214	Single Channel Buffer Amplifier	BA389	Isolated Buffer Amplifier
		8609	Module Extender



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