



## 90IP Description

The 90IP (AC Powered) and 90IPB (External Battery Operated, 12V DC) Instrumentation Platforms are four slot chassis with controller that may be used as a bench-top instrument or in rack-mount systems. Each 90IP and 90IPB chassis has its own controller card and display providing both hard and soft front panel addressability along with space for up to 4 slot cards. The soft front panel allows GPIB or RS-232 communication to load pre-stored setup configurations. Each slot card has its own micro-controller to automatically configure the controller display when installing a slot card (smartSLOT Technology). Up to 32 of these multiple-channel instruments may be daisy chained and addressed from a PC interface to meet the needs of high channel count applications.

All 90IP's provide a carrier for a full range of products that will include:

- Programmable Filters from 0.1 Hz to 300 kHz
- Programmable Instrumentation Amplifiers
- Bridge Conditioning
- Arbitrary Waveform Generators

## 90IP and 90IPB Features

- AC or External Battery (12V DC) powered models available for a broad range of applications.
- The half-rack chassis allows for use in bench top or rack-mount applications utilizing the 90RM rack-mount shelf.
- Complete computer control through the GBIB or RS-232 interface.
- Soft LabWindows/CVI™ front panel for ease of use.
- FDI's smartSLOT Technology to maximize system flexibility

**90RM** – 19" Rack-Mount Shelf



## 90PF Features

- Large number of filter options
- Adjustable frequencies from 0.10 Hz to 256 kHz
- 60 dB pre & 20 dB post gain
- <-100 dB Noise & Distortion
- Input noise < 12 nV/ $\sqrt{\text{Hz}}$
- DC offset, factory set with fine adjustment on board.
- BNC I/O provides differential input and single ended output per channel.

## 90PGA Features

- Selectable single-ended or differential input, AC or DC coupled.
- Gain/phase matched channels
- LED clipping indicators
- Memory storage for up to 9 set-ups/channel
- Input noise 12 nV/ $\sqrt{\text{Hz}}$  typ.
- Programmable gain, to 64.5 dB in 0.5 dB steps.
- Input protection to 150 Volts P-P
- Outputs able to drive full range into 50  $\Omega$ .



## Specifications

(@ 25°C and Rated Power Input)

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### Electrical

#### 90IP

Line Voltage 115 or 230 VAC  
Power Consumption 1.0 Amps max.

#### 90IPB

Power Input Voltage 12V DC  
Power Consumption 7.5 Amps max.  
Power 90 Watts

### Physical

Height 5.25 inches, 13.34 cm  
Width 8.625 inches, 21.91 cm  
Depth 14 inches, 35.56 cm

Weight (Chassis and Controller only) 8.60 pounds,  
3.90 Kilograms

Mounting Bench Top or  
19" Rack mount

### Environmental

Operating Temperature +32°F to +104°F,  
0°C to +40°C

Storage Temperature -13°F to +131°F,  
-25°C to +55°C

Relative Humidity 95% max.,  
non-condensing

Altitude Up to 15,000 feet,  
4500 meters

## Ordering Information

### 90IP - AC Powered

### 90IPB – External 12V DC Battery Powered