

## NetScanner™ System

9IFC/90DB/90DC

### FEATURES

- Ethernet Interface for NetScanner™ System Modules
- Provides Power and Hardware Trigger Interface
- 10/100 Base-T Auto-Negotiating
- Universal AC Power
- Fiber Optic High Speed Host Interface



### APPLICATIONS

- Turbomachinery Test
- Vehicle Test
- Portable Test System

The NetScanner System is a distributed data acquisition configuration comprised of intelligent modules networked via the ubiquitous Ethernet interface to provide pneumatic and liquid pressure measurements, temperature measurements, barometric pressure monitoring, and pneumatic pressure control.

Each module utilizes a single electrical connection to conveniently connect power, hardware triggering signals, and host communication. To facilitate interconnection of these system components and support network topology demands, Pressure Systems offers a line of pre-engineered network solutions to accommodate a wide variety of configurations and requirements.

The Model 9IFC supports a single module solution to connect an Ethernet-ready host computer via a Model 9080 cable. The 9IFC's small size and versatile mounting options make it ideal for tight spaces like NEMA enclosures, panel boxes and installations where optimum placement demands remote locations. It is also valuable for pretest checkout of an individual module prior to implementation within the system network.

The Model 90DB provides a simple solution for configurations consisting of multiple modules. The 90DB provides power, hardware trigger, and communication distribution for up to 7 or 15 connected modules depending on the selected model while interfacing with the host via one category 5 Ethernet cable.

The Model 90DC provides a sophisticated solution via fiber-optic communication for as many as 24 modules. A high-speed fiber-optic uplink is used to interface the 90DC to a dedicated host computer or private network. The 90DC also provides fused power lines, power-on LED indicators, and isolated hardware triggers for each module.

Parameter	9IFC	90DB -08	90DB- 16	90DC	Units	Comments
<b>PHYSICAL / ENVIRONMENT</b>						
Connection(s)	1	7	15	24	each	MIL-C-26482 compatible, circular twist-lock
Size	3.5 x 3.5 x 2.0 (8.9 x 8.9 x 5.1)	14.8 x 17.6 x 3.5 (37.5 x 44.7 x 8.8) [2U]		24.1 x 17.6 x 12.2 (61.3 x 29.8 x 31.0) [7U]	inches (cm)	L x W x H
Weight	1 (0.45)	20 (9.07)		40 (18.14)	lb (kg)	
Operating Temperature Range	-20 to +70	0 to +40			°C	
Storage Temperature	-20 to +80	0 to +60			°C	
<b>ELECTRICAL</b>						
Input Voltage	100 - 250				VAC	Universal, 50-60 Hz
Output Voltage	24 ±1				VDC	Per module connector, fused @ 500 mA <sup>1</sup>
Output Power	16.8	150	200		W	max
Hardware Trigger Threshold	2.5				VDC	Per module, isolated <sup>2</sup> , TTL compatible
<b>OTHER</b>						
Host Communication	10/100 Base T			10/100 Base FX		
Host Interface	Ethernet RJ45			Fiber-optic, SC Duplex		
DC Power LED	N/A			24		
DC Power Fuse	Common			Individual	each	
Hardware Trigger	Common			Isolated		

**NOTES:**

- 1 Additional inline fuse between DC power supply and module connector, 90DC only.
- 2 Individually buffered and isolated, 90DC only.

*Specifications subject to change without notice.*

### Power Supply and Ethernet Switch

Networking multiple NetScanner System modules is as simple as networking multiple computers together on an Ethernet network. Each NetScanner module has its own IP address which identifies that module on a network. Their IP addresses and subnet masks can be used as supplied or changed to suit your LAN requirements<sup>1</sup>. They require DC power, which can be supplied from 18 to 36-volt sources, which will be regulated internally to assure a clean and steady excitation voltage. Additionally, each NetScanner module is capable of acquiring data on command via a hardware trigger, which is commonly used to correlate data between several devices. All of these features are accessed through a single connection for ease and simplicity. How you add them to your network can be as easy as choosing the appropriate network solution for your application.

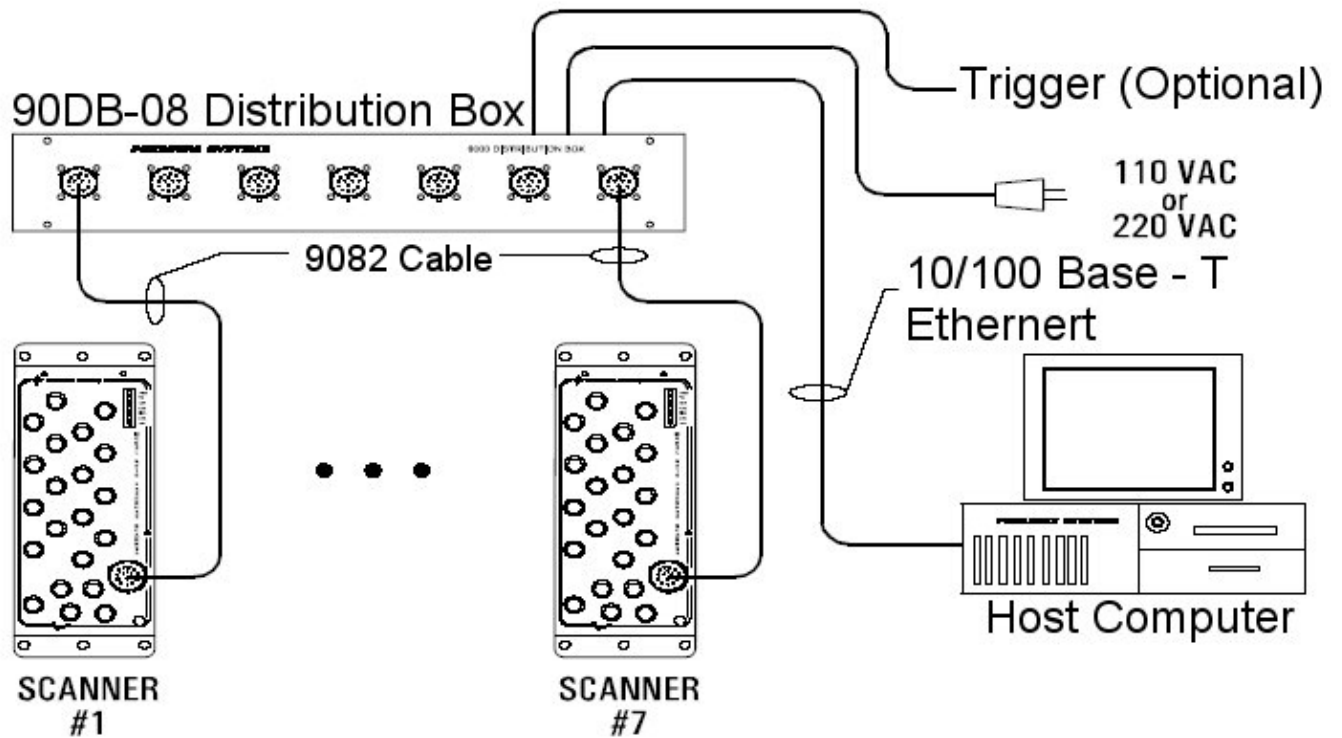
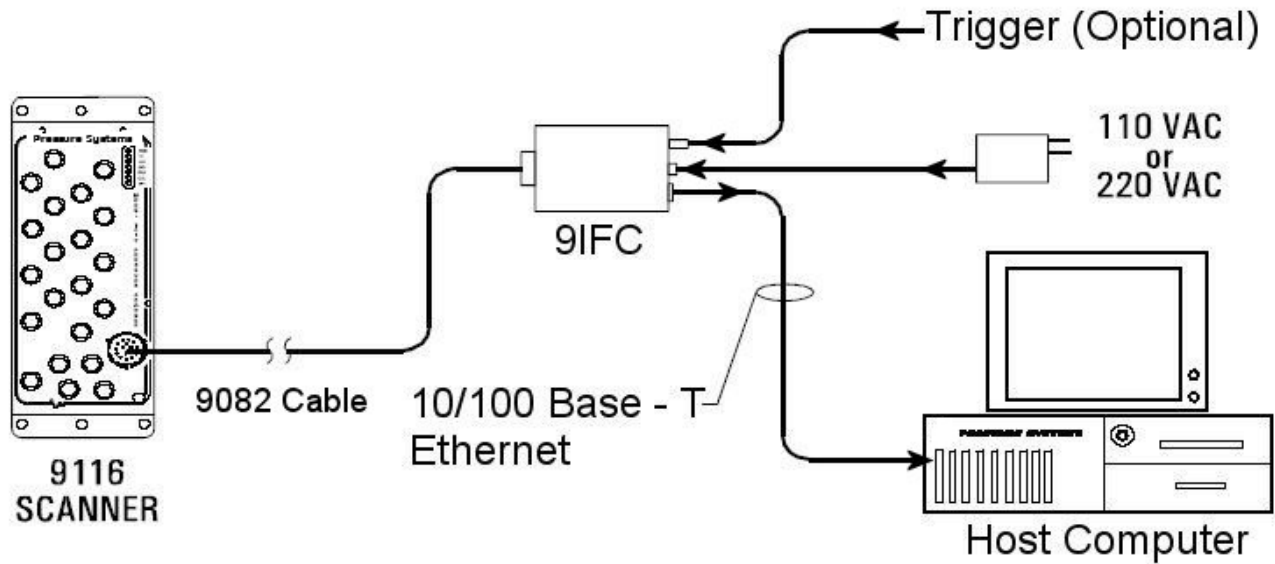
The 9IFC Single Scanner Interface offers power and communication for a single NetScanner module, giving the user DC power and hardware trigger inputs along with an Ethernet jack for full duplex TCP communications. The 9IFC has industry standard connections for each of these inputs and a robust design for multiple mounting options. Its lightweight and small footprint make it ideal for mobile test requirements or for local module verification for sites with large distributed networks.

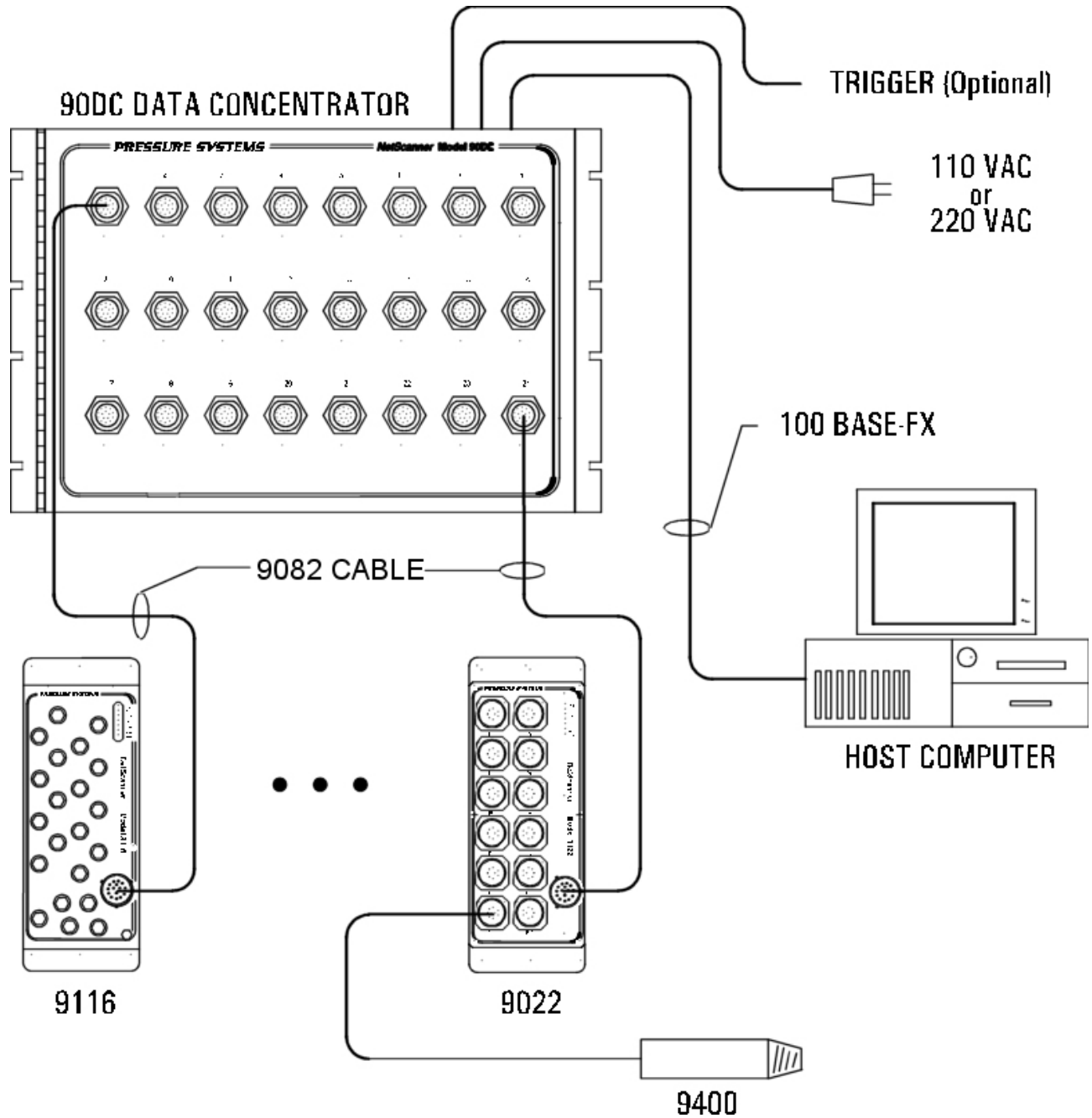
The 90DB Distribution Box incorporates a power supply capable of powering up to 15 NetScanner modules along with an Ethernet switch. Environmental operating characteristics and network performance are that of commercially available 10/100 Base-T Ethernet switches. A user supplied trigger signal is routed internally to each module connector. For convenience, additional units can be added or removed from the 90DB as needed without powering off other connected modules.

The 90DC Data Concentrator incorporates a power supply capable of powering up to 24 NetScanner modules along with a fast Ethernet switch. Data from the modules is buffered, utilizing a "store and forward" function of the switch, for insurance against collisions and "lost" packets. A 100 Mbit, high-speed, SC duplex multimode fiber optic uplink is used to interface the 90DC to a host computer or private network. For trigger requirements, the supplied signal is distributed and individually buffered to each module connector. This isolates the effects of any system fault and minimizes the drive current required for the trigger signal. All connected NetScanner modules have individually fused connections to the power supply as well as individual power on LEDs for visual verification. For convenience, addition units can be added or removed from the 90DC as needed without powering off other connected modules.

#### NOTES:

<sup>1</sup> Please consult your Network Administrator for policies regarding adding devices to your company's network.





**Ordering Information:**

PN: 9IFC-0301000000 Single Scanner Interface, Universal AC Power  
 PN: 90DC-2400021000 Data Concentrator, 24 port, Universal AC  
 PN: 90DB-AA0000DD00 Distribution Box, 19" Rack Mount

**AA = Number of Ports**

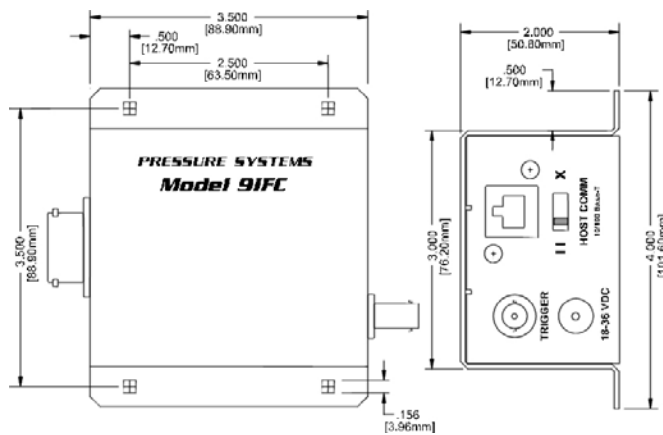
08, 8 Ports (supports 1-7 modules)  
 16, 16 Ports (supports 1-15 modules)

**DD = Power Option**

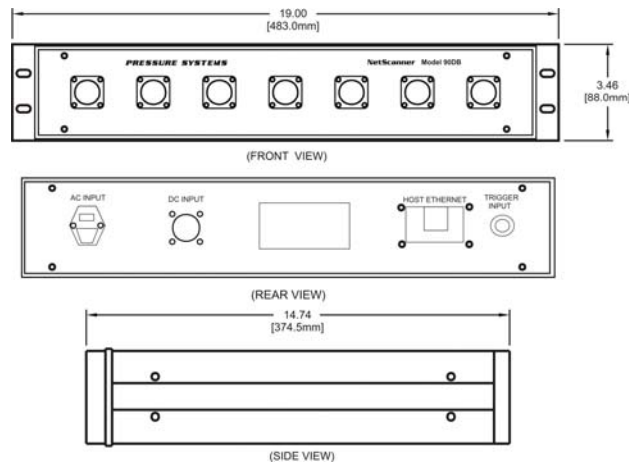
01, 110 VAC  
 02, 240 VAC

Example: 90DB-1600000100

Distribution Box, 15 port, 110 VAC, Ethernet



**9IFC**



**90DB**