

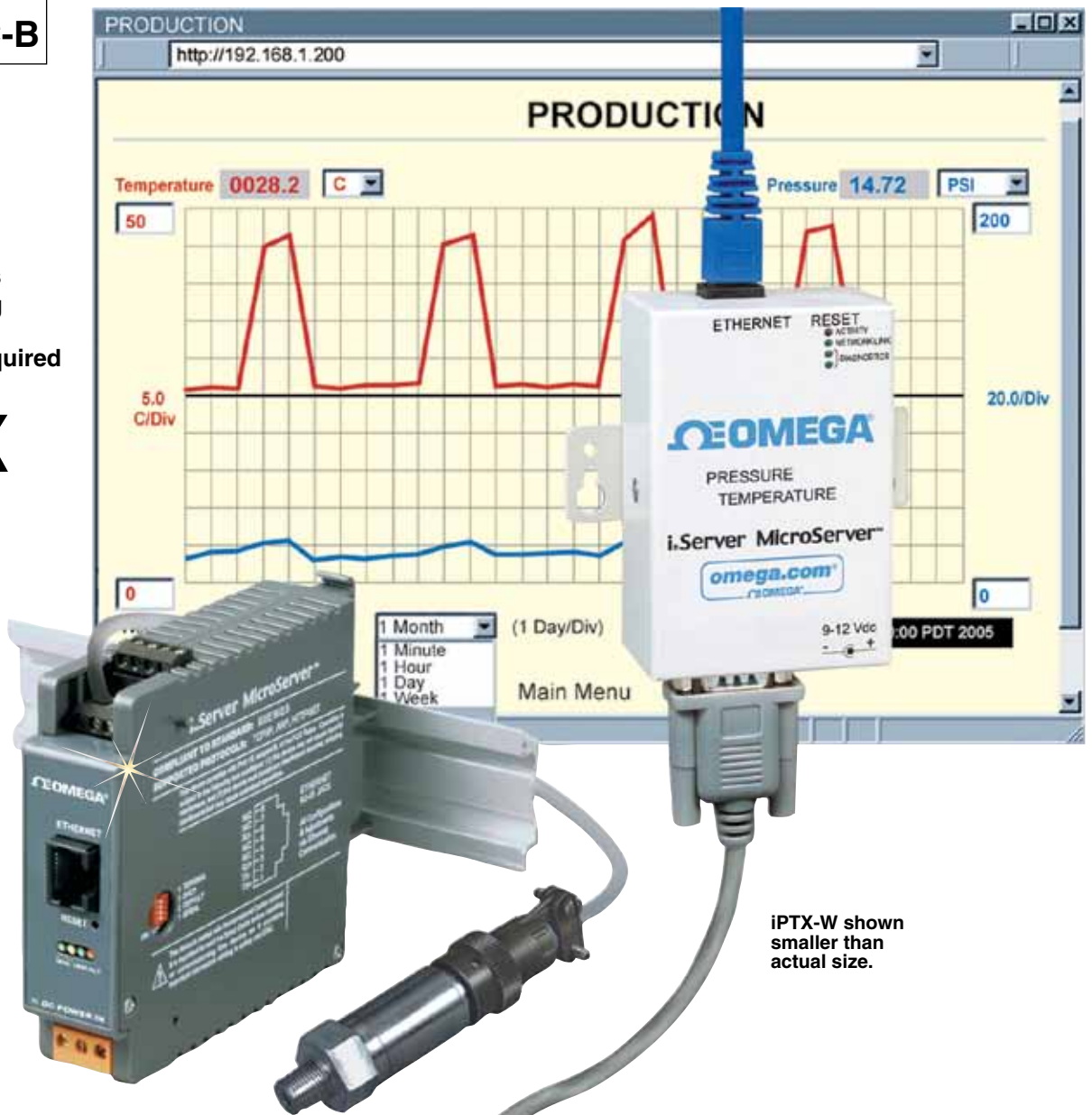
## Virtual Chart Recorder Pressure + Temperature

iServer MicroServer™

iPTX-D



- ✔ Virtual Chart Recorder
- ✔ Web Server
- ✔ Accurate
- ✔ Email Alarms
- ✔ Data Logging
- ✔ No Special Software Required



iPTX-D iServer MicroServer™ with pressure transducer (included), shown smaller than actual size.

All iPTX models include a 304 SS, 1/8"-27 NPT pressure transducer with twist lock connector!

### View Air (Inert Gas) Pressure and Temperature with a Web Browser

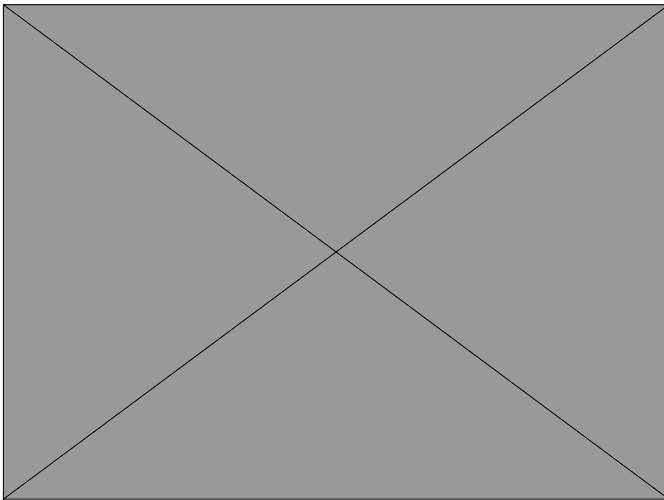
The OMEGA® iPTX transmitter lets the user monitor and record air (inert gas) pressure (0 to 200 psi) and temperature over an Ethernet network or the Internet with no special software except a Web browser. The OMEGA iPTX serves active Web pages to display real-time readings, display charts of

air pressure and temperature, or log data in standard formats for use in a spreadsheet or data acquisition program such as Excel or Visual Basic.

The virtual chart viewed on the Web page is a JAVA™ Applet that records a chart over the LAN or Internet in real time. With the OMEGA® iPTX, there is no need to invest time and money learning a proprietary software program to log or chart the data.

## Adjustable Charts

Chart scales are fully adjustable on the fly. For example, the chart can display one minute, one hour, one day, one week, one month or one year. Temperature can be charted across the full span (0 to 70°C) or within any narrow range (such as 20 to 30°C). Air (inert gas) Pressure can be displayed in kilopascals (kPa), pounds per square inch (psi) or kilograms per square centimeter (Kg/cm<sup>2</sup>).



Adjustable Chart Web Page.

## Display and Chart Measurements

The iPTX transmitters come complete with a air pressure / temperature probe for measurement of a single location.

## Award-Winning Technology

The OMEGA iPTX is simple to install and use, and features OMEGA's award-winning iServer technology that requires no special software except a Web Browser.

The iPTX connects to an Ethernet Network with a standard RJ45 connector and sends data in standard TCP/IP packets. It is easily configured with a simple menu using a Web Browser and can be password protected.

From within an Ethernet LAN or over the Internet, the user simply types its IP address or an easy to remember name such as "Cleanroom 5" or "Midwest Server Room" in any Web Browser, and the iPTX serves a Web Page with the current readings.

NIST-Traceable Calibration Certificate available. In compliance with ISO9001:2000, ISO10012-1.1992(E), ANSI/NC SL Z540-1.1994 and MIL-STD-45662A. Order CAL-3-A. See page 89 for details.

## Typical Applications

The OMEGA iPTX is great for monitoring air (inert gas) pressure and temperature in applications such as: HVAC systems, pharmaceutical and food processing and storage, hospitals, laboratories, semiconductor fabs, electronic assembly, warehousing, manufacturing, greenhouses, farm animal shelters, and many more.

## iPTX-M with Flash Memory and LCD Display

The OMEGA iPTX-M with LCD display adds several valuable features to the backlit local display of temperature and air pressure.

The "memory" model comes complete with a removable 2 MB flash memory card that can store one full year of readings taken at one-minute intervals (or two months of readings taken at 10-second intervals).

Up to 4 years of temperature and pressure readings can be stored on the 8 MB card.

With data being recorded in the built-in non-volatile flash memory, a failure on the Ethernet network will not interrupt the data record.

## Alarm Relays

The OMEGA iPTX-M features two 1.5 A relays. With the easy Web-based setup page, the two relays can be programmed for any combination of temperature or pressure, and high or low setpoints. The relays can also be programmed to remain latched and require a manual reset if a limit is exceeded.

## Email Alarms

In addition to the mechanical alarm relays, all OMEGA iPTX models on a LAN connected to the Internet can trigger an alarm that can be sent by email to a user or a distribution list anywhere in the world, including an Internet-enabled pager or cell phone.



## Battery Backup

The iPTX-M comes with a universal AC adaptor. A standard 9V alkaline battery (also included) allows the device to log data for up to 10 days without external AC power.

In locations without power or network accessibility, the iPTX-M continues logging data to its flash memory. The stored data can later be downloaded over the Ethernet.

## Sensor Specifications

**AIR (INERT GAS) PRESSURE (P)**  
**Accuracy/Range:** 0 to 200 psi  $\pm 2.4$   
 (0 to 14 bar  $\pm 0.2$ )

**Resolution:** 0.006 psi (0.4 mbar)

**⚠ Maximum safe pressure:**  
 250 psi absolute (17 bar abs)

## TEMPERATURE (T)

**Accuracy:**  $\pm 2^{\circ}\text{C}$  ( $\pm 3.6^{\circ}\text{F}$ )

**Range\*:** 0 to 70°C (32 to 158°F)

**Response Time:** 5 seconds

**Resolution:** 0.01°C, 14 bit

## PROBE PHYSICAL DIMENSIONS

**Probe:** 99 L x 19 mm Dia  
 (3.9 x 0.75") assembled

**Pressure Port:** 304 SST,  
 1/8-27 NPT

**Twist Lock Type Connector:**  
 PTIH-10-6P and PT06F-10-6S

**Cable with DB9 or Stripped Leads:** 3 m (10') long

**Cable Operating Temperature:**  
 0 to 105°C (32 to 221°F)

## iSERVER SPECIFICATIONS INTERFACES

**Ethernet:** 10Base-T (RJ45)

### Supported Protocols:

TCP/IP, UDP/IP, ARP, ICMP, DHCP, DNS, HTTP and Telnet

**Indicators (LEDs):** Network activity, network link, transmit and receive/diagnostics

**Memory:** 512 KB flash,  
 16 KB SRAM

**Management:** Device configuration and monitoring through embedded Web server

**Software:** Firmware upgradable. Includes an Excel program for automatic data logging within definable time intervals, compatible with all Windows operating systems.

**Embedded Web Server:** Serves Web pages containing real-time data and live updated charts within definable time intervals

### Power Input:

**iPTX-W:** 9 to 12 Vdc

**iPTX-D:** 10 to 32 Vdc

### Safety Qualified

### AC Power Adaptor:

**Nominal Output:** 9 Vdc @ 0.5 A

**Input:** 100 to 240 Vac, 50/60 Hz (included for iPTX-W). Switching power supply sold separately for iPTX-D

**Consumption:** 2.5 W max

\* Extended temperature range is for Industrial probe only, the iServer's operating temperature is 0 to 70°C.

## ENVIRONMENTAL

**Operating Temperature:**

0 to 70°C (32 to 158°F)

## PACKAGING

### Material:

**iPTX-W:** Metal case with flange mount

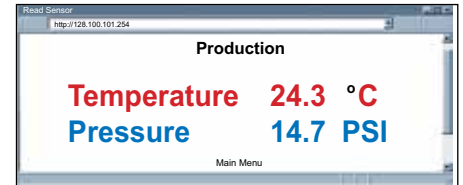
**iPTX-D:** Polycarbonate case with DIN rail mount

### Weight:

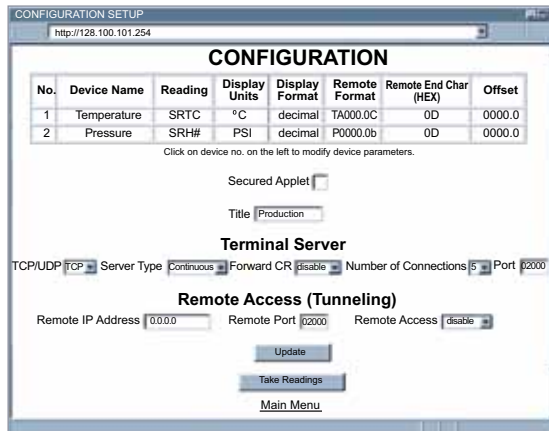
**iPTX-D:** 272 g (0.60 lb)

**iPTX-W:** 363 g (0.80 lb)

**Dimensions:** Refer to Mechanical Specifications page



Reading Sensor Web Page.



iPTX-W and iPTX-D Device Configuration Web Page.

The screenshot shows an Excel spreadsheet titled "iPTX Excel.xls". The table contains the following data:

Time	Temp	Pres	PH	Flow	Trans
15:2006 5:11:54 PM	75.56	991.600	0.00	32.00	0.00
15:2006 5:12:04 PM	75.56	991.600	0.00	32.00	0.00
15:2006 5:12:15 PM	75.56	991.500	0.00	32.00	0.00
15:2006 5:12:26 PM	75.56	991.600	0.00	32.00	0.00
15:2006 5:12:36 PM	75.56	991.600	0.00	32.00	0.00
15:2006 5:12:47 PM	75.56	991.600	0.00	32.00	0.00
15:2006 5:12:57 PM	75.56	991.600	0.00	32.00	0.00
15:2006 5:13:08 PM	75.56	991.600	0.00	32.00	0.00
15:2006 5:13:19 PM	75.56	991.600	0.00	32.00	0.00
15:2006 5:13:29 PM	75.56	991.700	0.00	32.00	0.00
15:2006 5:13:40 PM	75.56	991.600	0.00	32.00	0.00
15:2006 5:13:50 PM	75.56	991.600	0.00	32.00	0.00
15:2006 5:14:01 PM	75.56	991.600	0.00	32.00	0.00
15:2006 5:14:11 PM	75.56	991.700	0.00	32.00	0.00
15:2006 5:14:22 PM	75.56	991.600	0.00	32.00	0.00
15:2006 5:14:32 PM	75.56	991.600	0.00	32.00	0.00
15:2006 5:14:43 PM	75.56	991.700	0.00	32.00	0.00
15:2006 5:14:54 PM	75.56	991.700	0.00	32.00	0.00
15:2006 5:15:04 PM	75.56	991.600	0.00	32.00	0.00
15:2006 5:15:15 PM	75.56	991.600	0.00	32.00	0.00
15:2006 5:15:26 PM	75.56	991.600	0.00	32.00	0.00

Data Logging Spreadsheet.

## iDRN-PS-1000

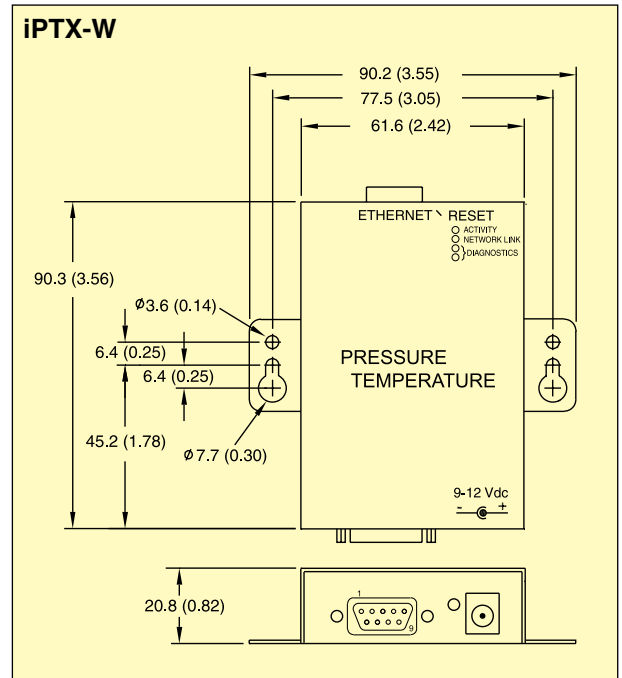
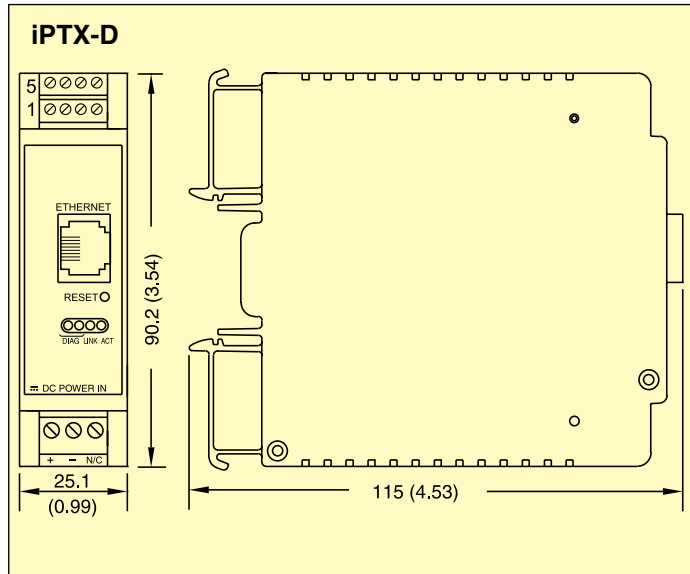
- ✓ 24 Vdc Supply
- ✓ Switching Power Supply Powers up to 7 Units



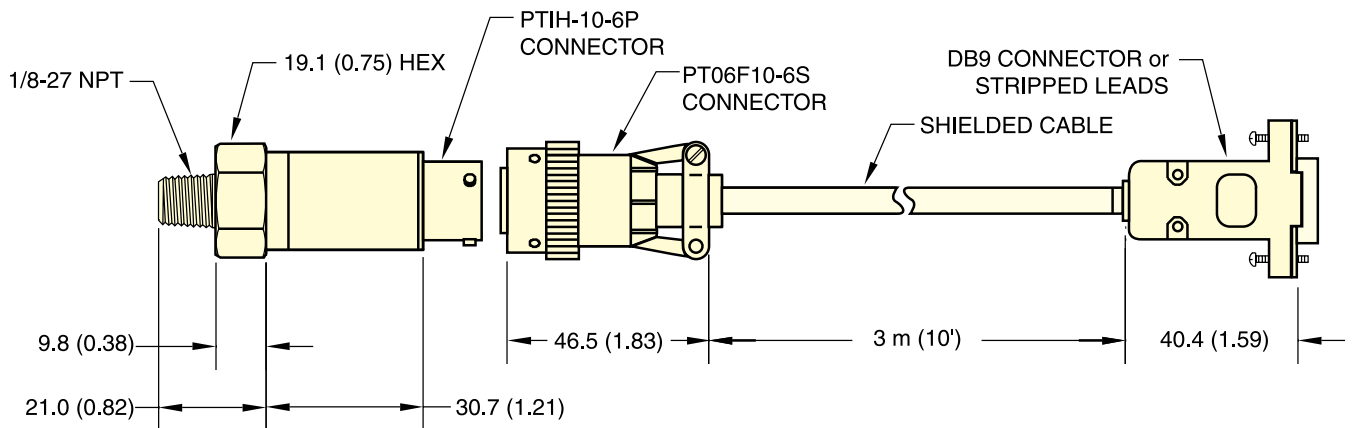
Mounts to 35 mm DIN rails.

## Mechanical Specifications

Dimensions: mm (in)



## iPTP / iPTP-DB9



## To Order

Model No.	Description
<b>iPTX-D</b>	DIN rail iServer industrial MicroServer™ for air (inert gas) pressure (0 to 200 psi) and temperature [includes probe with 3 m (10') cable, stripped wire leads]
<b>iPTX-W</b>	iServer MicroServer™ for air (inert gas) pressure (0 to 200 psi) and temperature [includes probe with 3 m (10') cable, DB9 connector and universal (100 to 240 Vac) power adaptor]
<b>Accessories</b>	
<b>iPTP</b>	Replacement probe with 3 m (10') cable, stripped wire leads (for iPTX-D)
<b>iPTP-DB9</b>	Replacement probe with 3 m (10') cable, DB9 connector (for iPTX-W)
<b>IDRN-PS-1000</b>	Power supply (switching), 95 to 240 Vac input, 24 Vdc output @ 850 mA, powers up to 7 units (for iPTX-D)
<b>CAL-3-A</b>	NIST-traceable calibration certificate, 3 pressure points, temp 25°C (for new units)

Comes complete with air pressure/temperature probe with 3 m (10') cable.

Ordering Example: **iPTX-D** iServer MicroServer™ with industrial air pressure/temperature probe with 3 m (10') cable.