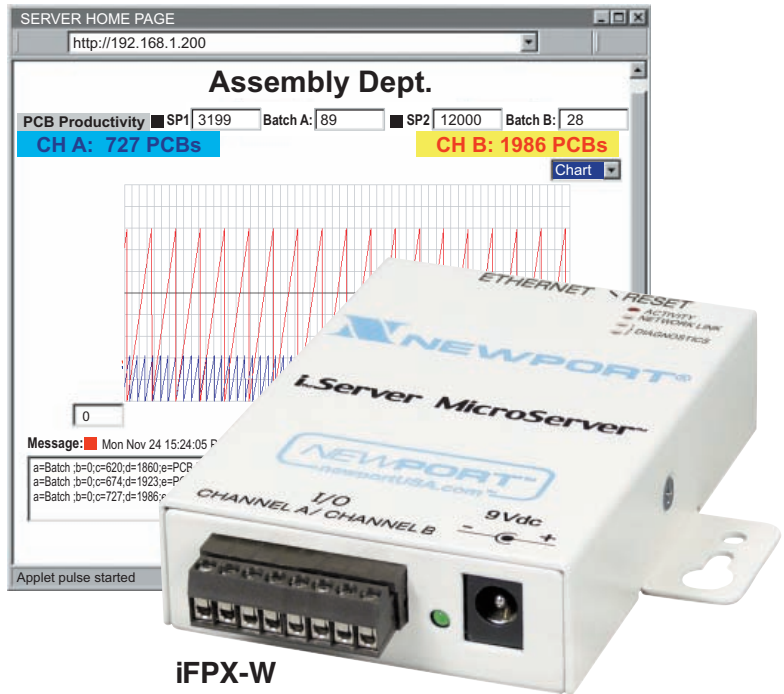


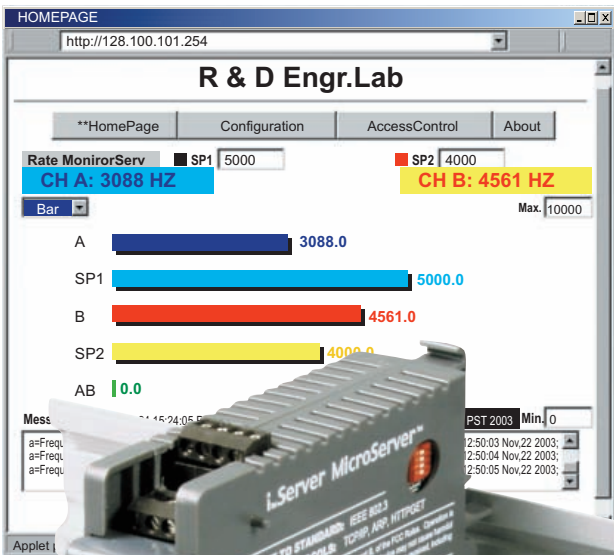
**iServer MicroServer™**



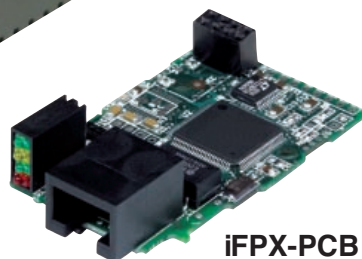
- ✓ Displays Rate, Frequency, Pulse, Total, Batch, and Quadrature over Ethernet and Internet
- ✓ Web based interface
- ✓ No special software needed
- ✓ Up to 500 KHz input
- ✓ Chart, Bar Graph, and X / Y displays
- ✓ 2 Channel input / output
- ✓ Custom firmware and private labeling for OEM's



**iFPX-W**



**iFPX-D  
with DIN Rail  
Case**



**iFPX-PCB**

The **NEWPORT® iFPX** Internet Counter puts “dumb” data on the World Wide Web. This revolutionary technology transmits virtually any conventional counting application up to 500 KHz over an Ethernet network or the Internet.

The **NEWPORT iFPX** (Internet Frequency Pulse Transmitter) can count contacts from the simplest button or switch, as well as count pulses from most any conventional transducer such as a proximity sensor or quadrature encoder. The iFPX converts raw data to intelligent information.

The iFPX can be configured as a virtual version of most any Rate/Frequency Meter, Totalizer, or Batch Controller. It is a node on an Ethernet network with a unique IP address and serves the data to any authorized computer on a LAN, WAN or the Internet. Set points can be programmed to trigger an alarm and even send email automatically to a Web-enabled cell phone.

No special software or drivers are required. A user can type the unit's IP address (or assigned name) on the address line of a Web Browser such as Internet Explorer. The device then serves actual JAVA based active Web pages that present the information numerically and graphically.

The iFPX supports the common Ethernet/Internet Protocols: TCP, UDP, ARP, Telnet, DHCP, DNS, and HTTP. The device integrates seamlessly with data acquisition and industrial automation program. The iFPX offers password protection for security.

The **NEWPORT iFPX** provides two discrete input/output channels. For applications that use two inputs, it can perform calculations with the data from channels A and B that can be presented numerically or graphically, such as charting position on an XY graph.

The **NEWPORT iFPX** is offered as a PC board for OEM applications, and as a stand-alone device suitable for industrial or commercial applications.

## SPECIFICATIONS

### INPUT TYPE

#### Dual Input A and B:

Min. Low level signal input (magnetic pickups): 120 mV

#### Open Collector NPN:

Max. current source: 1.66 mA

#### Open Collector PNP:

Max. current sink: 5 mA

#### TTL/CMOS Input:

Low  $\leq 0.8$  V, High  $\geq 3.5$  V  
(For Input: 1 Hz to 30 KHz)

Low  $\leq 0.8$  V, High  $\geq 10$  V  
(For Input: 1 Hz to 60 KHz)

### OPERATING MODES

#### Frequency:

Range = 1 Hz to 100 KHz Max. Input Frequency:

Input Level 0-5 V: 50 KHz

Input Level 0-12 V: 100 KHz

Frequency Resolution:

1 Hz to 100 KHz / 0.000000001 Hz

**Totalizer:** Range = 0 to 999999999\*

Totalizer Accuracy: 0.3%

#### A - B Totalize/Frequency:

(A input used with B input):

Could be A+B, A-B, Ax B, A/B

Range = -999999999 to 999999999\*

**Batch:** Similar to Totalize except the Batch = 0 to 65535

#### Quadrature:

Range = -999999999 to 999999999\*

\*Resolution is 1 count

#### Output A and B:

Open-collector transistors, rated 150mA sink, 30V. For external supply.

### EMBEDDED WEB SERVER

Serves dynamic Web pages and Java applets (256 Kbyte capacity)

## NETWORK INTERFACE

**Interface:** Ethernet 10Base-T

**Connector:** RJ45

**Protocols:** TCP/IP, UDP/IP, ARP, ICMP, DHCP, DNS, HTTP, Telnet

### INDICATORS (LED's)

Power, Network Activity, Network Link and Diagnostics

### MEMORY

512 Kbyte Flash, 16 Kbyte SRAM

### MANAGEMENT

Embedded Web server, Telnet login, Serial login

### GENERAL

**Input Impedance:**

1M ohm to +EXC 5V

**Excitation:** 5V at 25mA

(per channel)

**Debounce Time:** programmable

**Gate Time:** programmable

### ISOLATION

Dielectric strength per 1 minute test based on EN 61010.

**iFPX-W:** Pwr to ethernet: 1500Vrms

Pwr to input/output: none

Input/output to ethernet: 1500 Vrms

**iFPX-D:** Pwr to ethernet: 1500 Vrms

Pwr to input/output: 1500 Vrms

Input/output to ethernet: 1500 Vrms

### PACKAGING - iFPX-W

**Material:** Metal case with flange mount

#### Dimensions:

20.8H x 61.6W x 90.3D mm  
(0.83 x 2.93 x 3.56 in)

**Weight:** 180 g (0.4 lbs.)

### PACKAGING - iFPX-D

**Material:** Polycarbonate case with DIN Rail mount

#### Dimensions:

90.2H x 25.1W x 115.0D mm  
(3.54 x .99 x 4.53 in)

**Weight:** 113 g (0.25 lbs.)

### PACKAGING - iFPX-PCB

**Material:** FR-4 **Board Surface area:**

approximately 76 sq mm (3 sq in)

**Weight:** 23 g (0.05 lbs.)

## POWER INPUT - iFPX-W

**Input:** 9 Vdc @ 200 mA

Safety Qualified ac/dc power adapter with 9Vdc @ 0.5A min, included.

## POWER INPUT - iFPX-D

**Input:** 10-32 Vdc

**Consumption:** 2 W max.

(DC power supply sold separately)

## POWER INPUT - iFPX-PCB

**Input:** 5 Vdc @ 150 mA

## ENVIRONMENTAL

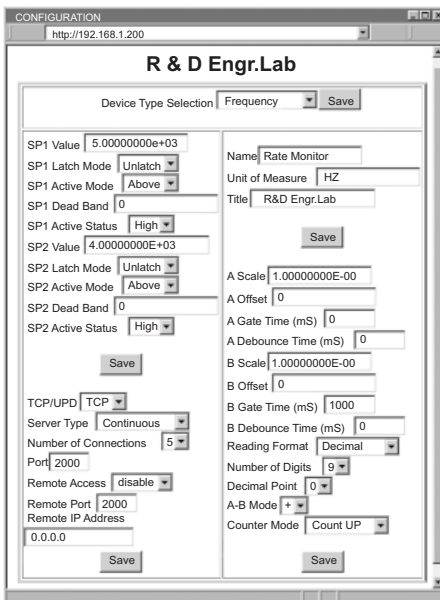
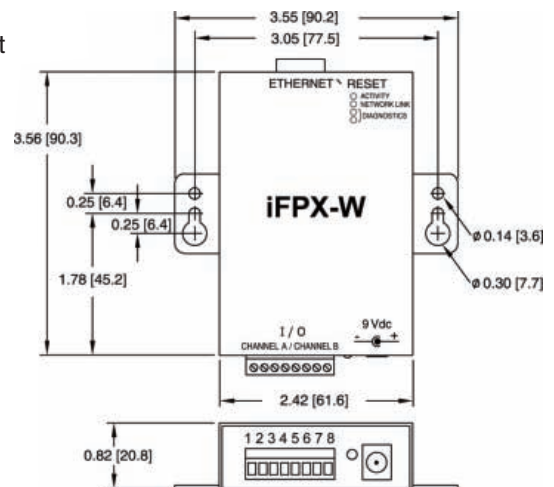
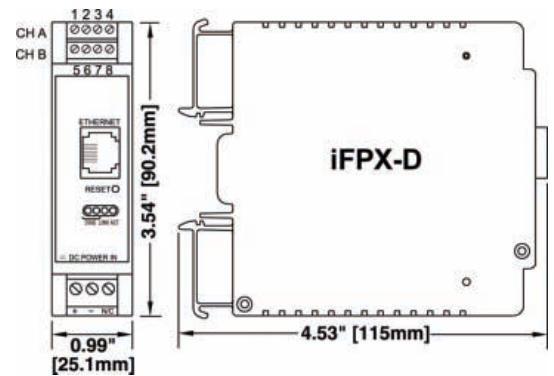
**Operating Temp:** 0 to 70°C (32 to 158°F)

**Storage Temperature:**

-40 to 125°C (-40 to 257°F)

**Relative Humidity:**

90% @ 40°C non-condensing



Configuration Menu

Model No.	Description
iFPX-W	iServer MicroServer™ for frequency pulse applications (up to 100 KHz input with EMC filtering), with ac power adapter
iFPX-D	Industrial iServer MicroServer™ for frequency pulse applications (up to 100 KHz input with EMC filtering)
iFPX-PCB	Embedded iServer MicroServer™ for frequency pulse applications (up to 100 KHz input with EMC filtering) TTL serial interface
iFPX-W5	iServer MicroServer™ for frequency pulse applications (up to 500 KHz input without EMC filtering), with ac power adapter
iFPX-D5	Industrial iServer MicroServer™ for frequency pulse applications (up to 500 KHz input without EMC filtering)
iFPX-PCB5	Embedded iServer MicroServer™ for frequency pulse applications (up to 500 KHz input without EMC filtering) TTL serial interface
Accessories	
iDRN-PS-1000	Power Supply (switching), 95 to 240 Vac input, 24 Vdc output @ 850mA (powers up to 7 units)

Volume discounts are available. Consult NEWPORT OEM team for application assistance and quantity pricing.