



# INTERNET COUNTER iSERVER

iServer MicroServer™

iFPX  
Starts at  
**\$245**



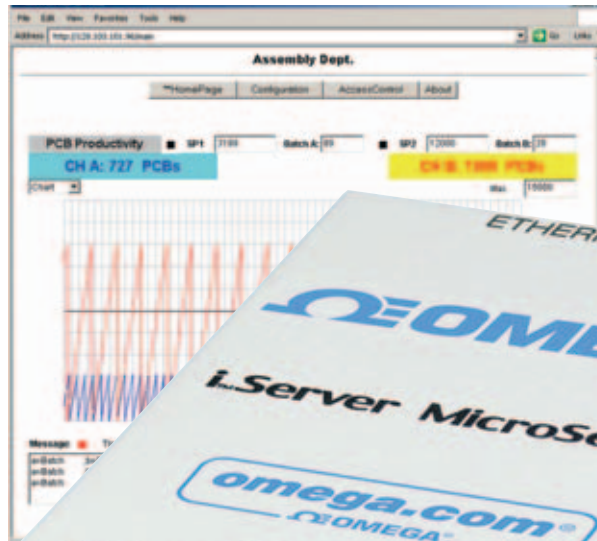
- ✓ Displays Rate, Frequency, Pulse, Total, Batch, and Quadrature over Ethernet and Internet
- ✓ Web-Based Interface
- ✓ No Special Software Needed
- ✓ Up to 500 kHz Input
- ✓ Chart, Bar Graph, and X/Y Displays
- ✓ 2 Channel Input/Output
- ✓ Custom Firmware and Private Labeling for OEMs

The OMEGA® 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.

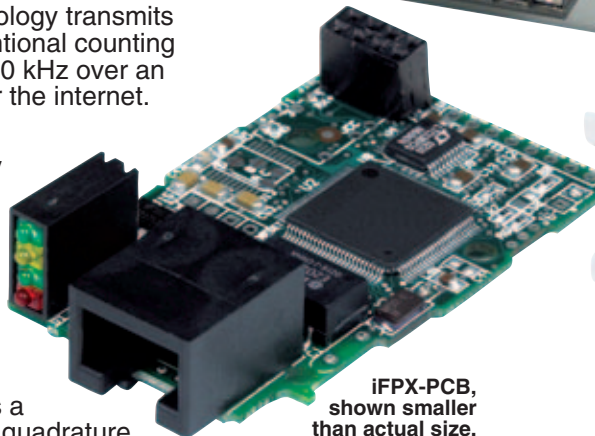
The OMEGA iFPX (Internet Frequency Pulse Transmitter) can count contacts from the simplest button or switch, as well as count pulses from almost any conventional transducer, such as a proximity sensor or quadrature encoder. The iFPX converts raw data to intelligent information.

The iFPX can be configured as a virtual version of almost 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. Setpoints 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



iFPX-W, \$245, shown larger than actual size.



iFPX-PCB, shown smaller than actual size.

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 programs. The iFPX offers password protection for security.



iFPX-D, \$245, with DIN rail case, shown smaller than actual size.

The iFPX provides 2 discrete input/output channels. For applications that use 2 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 OMEGA 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  $\leq 0.8V$ , high  $\geq 3.5V$   
(for input: 1Hz to 30 kHz)

Low  $\leq 0.8V$ , high  $\geq 10V$   
(for input: 1Hz to 60 kHz)

### Operating Modes

#### Frequency:

Range: 1 Hz to 100 kHz

#### Max Input Frequency:

Input level 0 to 5V: 50 kHz

Input level 0 to 12V: 100 kHz

#### Frequency Resolution:

$1 \times 10^{-10}$  Hz

#### Totalizer:

Range = 0 to 999999999\*

#### Totalizer Accuracy: 0.3%

\* Resolution is 1 count.

#### A/B Totalize/Frequency

#### (A Input Used with B Input):

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

Range = -999999999 to 999999999\*

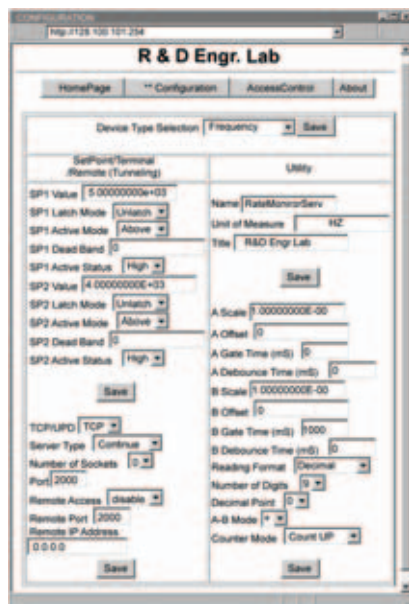
**Batch:** Similar to totalize except the batch = 0 to 65,535

**Quadrature:** Range = -999999999 to 999999999; resolution is 1 count

**Output A and B:** Open-collector transistors, rated 150 mA sink, 30V. For external supply.

#### Embedded Web Server:

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



## Network Interface

**Interface:** Ethernet 10Base-T

**Connector:** RJ45

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

**Indicators (LEDs):** Power, network activity, network link and diagnostics

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

**Management:** Embedded Web server, Telnet login, serial login

### GENERAL

**Input Impedance:** 1 M $\Omega$  to +EXC 5V

**Excitation:** 5V at 25 mA (per channel)

**Debounce Time:** Programmable

**Gate Time:** Programmable

**Isolation:** Dielectric strength per 1 minute test based on EN 61010

**iFPX-W:** Power to Ethernet:

1500 Vrms; power to input/output: none; input/output to Ethernet:

1500 Vrms

**iFPX-D:** Pwr to Ethernet:

1500 Vrms; power to input/output:

1500 Vrms; input/output to Ethernet:

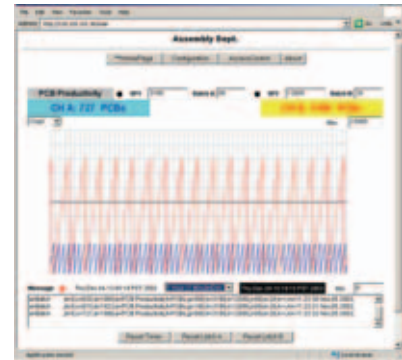
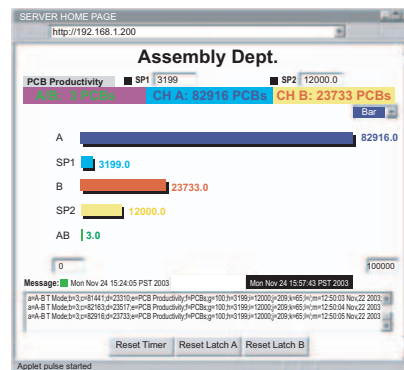
1500 Vrms

### Power

**iFPX-W:** 9 Vdc @ 200 mA; AC/DC power adaptor included (9 Vdc @ 0.5 A min)

**iFPX-D:** 10 to 32 Vdc; 2 W max consumption

**iFPX-PCB:** 5 Vdc @ 150 mA



### Environmental

**Operating Temperature:**

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

### Physical

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

**Dimensions:**

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

**Weight:** 180 g (0.4 lb)

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

**Dimensions:**

90.2 H x 25.1 W x 115.0 mm D  
(3.54 x 0.99 x 4.53")

**Weight:** 113 g (0.25 lb)

**iFPX-PCB:** circuit board; FR-4

**Board Surface Area:** Approximately 76 mm<sup>2</sup> (3 in<sup>2</sup>)

**Weight:** 23 g (0.05 lb)

**MOST POPULAR MODELS HIGHLIGHTED!**

## To Order (Specify Model Number)

Model No.	Price	Input	Physical
iFPX-W	\$245	Up to 100 kHz with EMC filtering	Metal case, with AC adaptor
iFPX-D	245		DIN rail mount
iFPX-PCB	*		PC board, TTL serial interface
iFPX-W5	270	Up to 500 kHz without EMC filtering	Metal case, with AC adaptor
iFPX-D5	270		DIN rail mount
iFPX-PCB5	*		PC board, TTL serial interface

\* Consult OMEGA for application assistance and quantity pricing.

### Accessory

Model No.	Price	Description
iDRN-PS-100	\$150	95 to 240 Vac power supply, 24 Vdc output @ 850 mA DIN rail mount; for up to 7 units

**Ordering Examples:** iFPX-W iServer MicroServer™ for frequency inputs to 100 kHz, with AC adaptor, \$245.

iFPX-D5 DIN rail mount industrial iServer MicroServer™ for frequency inputs to 500 kHz, with iDRN-PS-100, DIN rail mount power supply, \$270 + 150 = \$420.



#### UNITED STATES

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Stamford, CT.

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