

## Description:

The **PC3** provides single-ended, open collector outputs and includes a miniature switching power regulator that accepts a power supply from 9.5 to 32 volts. The **PC3** is intended for applications where 5VDC is not available to power the encoder, or a higher voltage output from the encoder channel is needed. To achieve the desired output voltage range, add external pull-up resistors to the **PC3** open collector outputs. The **PC3** provides the added benefit of being a single-ended cable driver for cables up to 500 feet in length.

The **PC3-2** is the inline version of our **PC3** and is designed for applications where space is limited.

Compatibility for US Digital products:

- **PC3** is used with the **E2** and **H1**.
- **PC3-2-C5** is used with the **E2, E3, H1, H3, S1, S2** and **T2**.
- **PC3-2-LC5** is used with the **E2, E3, H1, H3, S1, S2** and **T2**.
- **PC3-2-FC5** is used with the **E5M, E5S, E6S, E6M, H5S, H6S, S5S** and **S6S**.
- **PC3-2-W5** is used only when customers do not want a connector attached.

US Digital warrants its products against defects in materials and workmanship for two years. See complete for details.

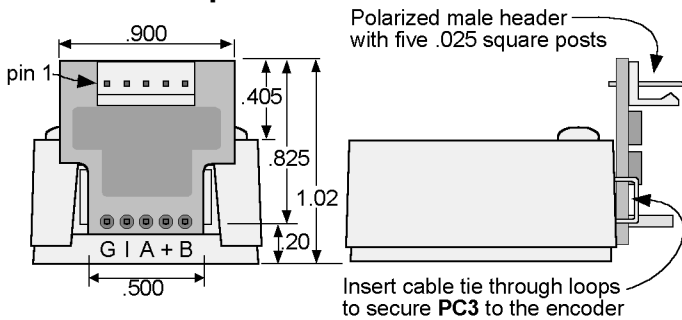


PC3-2-FC5 shown mounted on an E5M encoder

## Absolute Maximum Ratings:

Parameter	Min.	Max.	Units
Storage Temperature	-40	100	°C
Operating Temperature	-40	85	°C

## Mechanical Specifications:



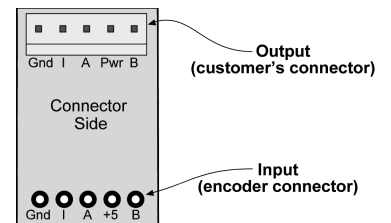
PC3 shown mounted on an E2 encoder

## Electrical Characteristics:

Parameter	Min	Typ.	Max.	Units	Notes
Supply Voltage (PWR)	9.5	-	32	Volts	
Supply Current	-	-	75	mA	
Conversion Efficiency	80%	85%	-	-	12V input
Output Voltage Low	-	-	.4	Volts	100 mA

## Pin-out:

Pin	Name	Description
1	GND	Ground
2	I	Index
3	A	A Channel
4	PWR	+5VDC Power
5	B	B channel



## Connector Options: (for 2-option only)

<b>W5</b> = Five 12" discrete wires without connector at input, 5-pin male output.	<b>No Cost</b>
<b>C5</b> = Five 6" discrete wires with standard mating connector at input, 5-pin male output.	<b>\$2.50</b>
<b>LC5</b> = Five 6" discrete wires with locking mating connector at input, 5-pin male output.	<b>\$4.50</b>
<b>FC5</b> = Five 6" discrete wires with finger-latching mating connector at input, 5-pin finger-latching header at output.	<b>\$4.50</b>

## Ordering Information:

Price:

\$19 / 1

\$18 / 100

\$17 / 500

\$16 / 1K

PC3 -

Options:

1 = No connector.

2 = Inline with cable.

-

See above for Connector Options (for 2-option only).

Technical Data, Rev. 05.01.02, May 2002  
All Information subject to change without notice.