FLEX I/O Counter Modules

In order to decide which FLEX I/O counter module would best suit your application needs, you should identify the following:

- What type of application the module will be used for
- What field devices, signal levels, and signal type are being connected to the counter module

Counter Module Comparison

Catalog Number	Application	Network Capability	Number of Inputs/ Outputs	External DC Supply Current, Nom	Power Dissipation, Max	Thermal Dissipation, Max
1794-IJ2 1794-IJ2XT	Rational control, including: • turbine generators • motors • drives • gears • shaft	All networks supported by FLEX I/O	2 Input 2 Output	220 mA @ 19.2V DC 180 mA @ 24V DC 140 mA @ 31.2V DC	4.5 W @ 31.2V DC	15.3 BTU/hr @ 31.2V DC
1794-VHSC	Applications including: • packaging • material handling • flow monitoring • cut-to-length • motor speed control • monitoring	ControlNet: • 1794-ACN15 • 1794-ACNR15 EtherNet/IP: • 1794-AENT • 1794-AENTR	2 Input 2 Output	100 mA @ 24V DC(1)	5W @ 31.2V DC	17.1 BTU/hr @ 31.2V DC
1794-ID2	Applications including: • quality counting • positioning • speed calculations	All networks supported by FLEX I/O	2 Input	150 mA @ 12V DC 75 mA @ 24V DC	5.0 W @ 26.4V DC	17.1 BTU/hr @ 26.4V DC
1794-IP4	Applications including: • counting pulse from flow meters • counting pulse from density meters • quality counting • speed calculations		4 Input			

(1) Does not represent power required to supply the inputs or outputs

1794-ID2 2 Input Pulse Counter Module

The 1794-ID2 module is a 2-channel counter used in applications where pulse counting is required. Typical input devices include quadrature incremental encoders with or without reference and/or gate function and pulse transmitters. You can use one or two pulse trains.

2 Input Pulse Counter Module

Specification	1794-ID2
Input pulse width	Each signal condition must be stable for at least 2 ms to be recognized
Input groups	2 groups of A, B, Z, G inputs
Counting frequency, max	100 kHz
Cable type	Input: Belden 8761
Wire category	2(1)
Conductor length, max	304.8 m (1000 ft)
Input signal range	3 mA @ 6V DC 9 mA @ 12V DC 15 mA @ 24V DC
Dimensions (WxHxD), approx	46 x 94 x 53 mm (1.8 x 3.7 x 3.1 in.) 94 x 94 x 69 mm (3.7 x 3.7 x 2.7 in.) installed

(1) Use this Conductor Category information for planning conductor routing. Refer to Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1.