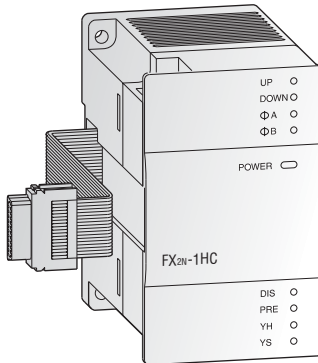


## High-Speed Counter Modules

 FX1S  FX1N  FX3G  FX3U  FX3UC

### FX2N-1HC, FX2NC-1HC

In addition to the internal high-speed MELSEC FX counters, the high-speed counter modules FX2N-1HC and FX2NC-1HC provide the user with an external counter. It counts 1- or 2-phase pulses up to a frequency of 50 kHz. The counting range covers either 16 or 32 bit. The two integrated transistor outputs can be switched independently of one another by means of internal comparison functions. Hence, simple positioning tasks can also be realized economically. In addition, the FX2N-1HC and FX2NC-1HC can be used as a ring counter.



Specifications	FX2N-1HC	FX2NC-1HC
Signal level	5, 12, 24 V DC/7 mA	5, 12, 24 V DC/7 mA
Counter inputs	2 (1 phase) or 1 (2 phase)	2 (1 phase) or 1 (2 phase)
Max. counting frequency	kHz 50	50
Input format	bit 16, 32	16, 32
Type of counter	Up/down counter, ring counter	Up/down counter, ring counter
Counting range	16 bit	0–65535
	32 bit	-2147483648—+2147483647
Output type	2 x transistor (5–24 V DC; 0.5 A)	2 x transistor (5–24 V DC; 0.5 A)
Power supply	5 V DC	90 mA (from base unit)
	24 V DC	—
Related I/O points	8	8
Weight	kg 0.3	0.13
Dimensions (WxHxD)	mm 55x90x87	20.2x90x89
<b>Order information</b>	Art. no. 65584	217916

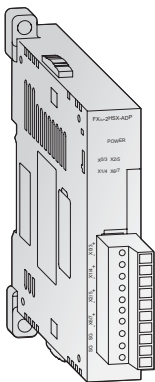
## High-Speed Counter Adapters

 FX1S  FX1N  FX3G  FX3U  FX3UC

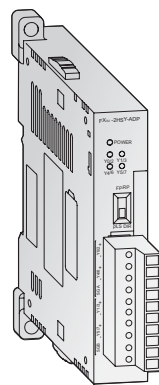
### FX3U-4HSX-ADP, FX3U-2HSY-ADP, FX3U-2HC

These adapter modules allow direct processing of positioning application data. The FX3U-4HSX-ADP and the FX3U-2HC provide high speed counter inputs up to 200 kHz while the FX3U-2HSY-ADP delivers 2 channels of pulse train outputs up to 200 kHz.

*Note: The adapters FX3U-□-ADP can only be used with the FX3U and they require a function extension board.*



FX3U-4HSX-ADP



FX3U-2HSY-ADP

Specifications	FX3U-4HSX-ADP	FX3U-2HSY-ADP	FX3U-2HC
Counter	inputs	4	—
	outputs	—	2
Max. counting frequency	inputs	1 ch 1 input or 1 ch 2 inputs: 200	—
	outputs	2 ch 2 inputs: 100	200
Input format	inputs	Differential line receiver (AM26C32 is suitable) Photocoupler isolation on inputs	Differential line receiver (AM26C32 is suitable) Photocoupler isolation on inputs
	outputs	—	Differential line driver (AM26C31 is suitable) Normal rotation pulse train, reverse pulse train or pulse train + one
Output format	—	—	Transistor output, 5–24 V DC When the counter value coincides with an output compare value, the appropriate output is set ON.
Maximum cable length	m 10	10	10
Input potential	5 V DC	—	5/12/24 V DC
Output load	—	less than 25 mA	0.5 A
Maximum connectivity	2	2	8
Power supply	5 V DC	30 mA (from base unit)	30 mA (from base unit)
	24 V DC	30 mA (from base unit)	60 mA (from base unit)
Related I/O points	0	0	8
Weight	kg 0.08	0.08	0.08
Dimensions (WxHxD)	mm 17.6x90 (106)x89.5	17.6x90 (106)x89.5	55x90x87
<b>Order information</b>	Art. no. 165274	165275	232805