



Семейство MELSEC FX.



Богатое оснащение и гибкая конфигурация системы при компактных размерах

Базовые блоки контроллера MELSEC семейства FX объединяют блок сетевого питания, центральный процессор и цифровые входы-выходы в одном компактном модуле. Учитывая возможность их расширения цифровыми и аналоговыми входами и выходами, функцией позиционирования.

Дополнительная информация

Все функции ПЛК в компактном исполнении



Более 30 лет назад Mitsubishi Electric выпустила первый компактный ПЛК на европейский рынок. С тех пор компания лишь укрепляла свои позиции лидера мирового рынка в этой области, имея на сегодняшний день в своем активе более 17-ти миллионов проданных компактных контроллеров. Благодаря своим небольшим размерам и низкой стоимости компактные контроллеры открыли новые перспективы в

автоматизации производства. Множество прикладных задач, для которых когда-то автоматизация была недоступна, теперь можно легко решить, воспользовавшись преимуществами, предоставляемыми этими контроллерами.

Серия FX3U – третье поколение чрезвычайно успешного семейства компактных контроллеров Mitsubishi Electric. Новая линия задает стандарты не только в классе. Серия FX3U переводит компактные контроллеры в другое измерение, обеспечивая производительность, которой прежде обладали только большие системы управления.

Семейство FX на сегодняшний день включает независимых, но полностью совместимых линейки продуктов:



Что можно ожидать от семейства MELSEC FX?

- **Широкие возможности применения** - благодаря поддержке широкого диапазона электропитания контроллеры FX могут использоваться по всему миру

- **Соответствие на международном уровне** - контроллеры MELSEC FX соответствуют всем основным международным промышленным и морским стандартам
 - **Гибкие решения** - базовый модуль можно дополнить модулями расширения и специальными функциональными модулями, собрав систему, точно удовлетворяющую потребностям определенной прикладной задачи
 - **Простое программирование** - сложные функции можно объединить и выполнить, как одну команду
 - **Скорость** – семейство FX всегда устанавливало новые стандарты быстродействия (FX3U: 0,065 мкс на логическую команду).
 - **Совместимость** - линейки в семействе FX - различные и независимые продукты, но они полностью совместимы друг с другом
- Базовые блоки контроллера
 - Расширения входов и выходов
 - Аналоговые модули
 - Высокоскоростные счетчики
 - Позиционирование
 - Сетевая коммуникация
 - Опция

➤ Базовые блоки контроллера



Базовый блок программируемого контроллера, объединяющий в себе блок сетевого питания, центральный процессор и входы-выходы. В число встроенных функций входят высокоскоростной счетчик и выходы для позиционирования.

Технические характеристики

- FX3G/FX3GE/FX3GC
- FX3S
- FX3U/FX3UC

✓ FX3G/FX3GE/FX3GC

Base units FX3G series

Base units with 14–24 I/Os

Specifications	FX3G-14 MR/ES	FX3G-14 MT/ESS	FX3G-14 MR/DS	FX3G-14 MT/DSS	FX3G-24 MR/ES	FX3G-24 MT/ESS	FX3G-24 MR/DS	FX3G-24 MT/DSS
Integrated inputs /outputs	14	14	14	14	24	24	24	24
Power supply	100–240 V AC	100–240 V AC	24V DC	24V DC	100–240 V AC	100–240 V AC	24 V DC	24 V DC
Integrated inputs	8	8	8	8	14	14	14	14
Integrated outputs	6	6	6	6	10	10	10	10
Output type	Relay	Transistor (source)*	Relay	Transistor (source)*	Relay	Transistor (source)*	Relay	Transistor (source)*
Power consumption	W 31	31	19	19	32	32	21	21
Weight	kg 0.50	0.50	0.50	0.50	0.55	0.55	0.55	0.55
Dimensions (WxHxD)	mm 90x90x86	90x90x86	90x90x86	90x90x86	90x90x86	90x90x86	90x90x86	90x90x86
Order information	Art. no. 231466	231470	231474	231478	231467	231471	231475	231479

Base units with 40–60 I/Os

Specifications	FX3G-40 MR/ES	FX3G-40 MT/ESS	FX3G-40 MR/DS	FX3G-40 MT/DSS	FX3G-60 MR/ES	FX3G-60 MT/ESS	FX3G-60 MR/DS	FX3G-60 MT/DSS
Integrated inputs/outputs	40	40	40	40	60	60	60	60
Power supply	100–240 V AC	100–240 V AC	24 V DC	24 V DC	100–240 V AC	100–240 V AC	24 V DC	24 V DC
Integrated inputs	24	24	24	24	36	36	36	36
Integrated outputs	16	16	16	16	24	24	24	24
Output type	Relay	Transistor (source)*	Relay	Transistor (source)*	Relay	Transistor (source)*	Relay	Transistor (source)*
Power consumption	W 37	37	25	25	40	40	29	29
Weight	kg 0.70	0.70	0.70	0.70	0.85	0.85	0.85	0.85
Dimensions (WxHxD)	mm 130x90x86	130x90x86	130x90x86	130x90x86	175x90x86	175x90x86	175x90x86	175x90x86
Order information	Art. no. 231468	231472	231476	231480	231469	231473	231477	231481

* Sink type transistor output units on request.

Base units FX3GE series

Base units with 24 I/Os

Specifications	FX3GE-24 MR/ES	FX3GE-24 MT/ESS	FX3GE-24 MR/DS	FX3GE-24 MT/DSS
Integrated inputs/outputs	24	24	24	24
Power supply	100–240 V AC	100–240 V AC	24 V DC	24 V DC
Integrated inputs	14	14	14	14
Integrated outputs	10	10	10	10
Output type	Relay	Transistor (source)*	Relay	Transistor (source)*
Power consumption	W 32	32	21	21
Weight	kg 0.6	0.55	0.55	0.55
Dimensions (WxHxD)	mm 130x90x86	130x90x86	130x90x86	130x90x86
Order information	Art. no. 264869	269884	269917	269919

Base units with 40 I/Os

Specifications	FX3GE-40 MR/ES	FX3GE-40 MT/ESS	FX3GE-40 MR/DS	FX3GE-40 MT/DSS
Integrated inputs/outputs	40	40	40	40
Power supply	100–240 V AC	100–240 V AC	24 V DC	24 V DC
Integrated inputs	24	24	24	24
Integrated outputs	16	16	16	16
Output type	Relay	Transistor (source)*	Relay	Transistor (source)*
Power consumption	W 37	37	25	25
Weight	kg 0.8	0.70	0.70	0.70
Dimensions (WxHxD)	mm 175x90x86	175x90x86	175x90x86	175x90x86
Order information	Art. no. 264870	269916	269920	269922

* Sink type transistor output units on request.

Base units FX3GC series**Base units with 32 I/Os**

Specifications	FX3GC-32 MT/D		FX3GC-32 MT/DSS	
Integrated inputs/outputs	32		32	
Power supply	24V DC		24V DC	
Integrated inputs	16		16	
Integrated outputs	16		16	
Output type	Transistor (sink)		Transistor (source)	
Power consumption	W	8	8	
Weight	kg	0.2	0.2	
Dimensions (WxHxD)	mm	34x90x87	34x90x87	
Order information	Art. no.	251545	251546	

Models mentioned above: FX3G-14MR/ES,FX3G-14MT/ESS,FX3G-14MR/DS,FX3G-14MT/DSS,FX3G-24MR/ES,FX3G-24MT/ESS,FX3G-24MR/DS,FX3G-24MT/DSS,MR/ES,FX3G-40MT/ESS,FX3G-40MR/DS,FX3G-40MT/DSS,FX3G-60MR/ES,FX3G-60MT/ESS,FX3G-60MR/DS,FX3G-60MT/DSS,FX3GE-24MR/ES,FX3GE-24MT/ESS,FX3GE-24MR/DS,FX3GE-24MT/DSS,FX3GE-40MR/ES,FX3GE-40MT/ESS,FX3GE-40MR/DS,FX3GE-40MT/DSS,FX3GC-32 MT/D ,FX3GC-32 MT/DSS

✓ **FX3S****Base units with 10–14 I/Os**

Specifications	FX3S-10 MR/ES	FX3S-10 MR/DS	FX3S-10 MT/ESS	FX3S-10 MT/DSS	FX3S-14 MR/ES	FX3S-14 MR/DS	FX3S-14 MT/ESS	FX3S-14 MT/DSS
Integrated inputs/outputs	10	10	10	10	14	14	14	14
Power supply	100–240V AC	24V DC	100–240V AC	24V DC	100–240V AC	24VDC	100–240V AC	24V DC
Integrated inputs	6	6	6	6	8	8	8	8
Integrated outputs	4	4	4	4	6	6	6	6
Output type	Relay	Relay	Transistor (source)*	Transistor (source)*	Relay	Relay	Transistor (source)*	Transistor (source)*
Power consumption	W	19	6	19	6	19	6,5	19
Weight	kg	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Dimensions (WxHxD)	mm	60x90x75	60x90x49	60x90x75	60x90x49	60x90x75	60x90x49	60x90x75
Order information	Art. no.	267110	271687	267112	271695	267113	271688	267125
								271696

Base units with 20–30 I/Os

Specifications	FX3S-20 MR/ES	FX3S-20 MR/DS	FX3S-20 MT/ESS	FX3S-20 MT/DSS	FX3S-30 MR/ES	FX3S-30 MR/DS	FX3S-30 MR/ES-2AD	FX3S-30 MT/ESS	FX3S-30 MT/ESS-2AD	FX3S-30 MT/DSS
Integrated inputs/outputs	20	20	20	20	30	30	30	30	30	30
Power supply	100–240V AC	24V DC	100–240V AC	24V DC	100–240V AC	24V DC	100–240V AC	100–240V AC	100–240V AC	24V DC
Integrated inputs	12	12	12	12	16	16	16	16	16	16
Integrated outputs	8	8	8	8	14	14	14	14	14	14
Output type	Relay	Relay	Transistor (source)*	Transistor (source)*	Relay	Relais	Relais	Transistor (source)*	Transistor (source)*	Transistor (source)*
Power consumption	W	20	7	20	7	21	8,5	21	21	8,5
Weight	kg	0.40	0.40	0.40	0.40	0.45	0.45	0.45	0.45	0.45
Dimensions (WxHxD)	mm	75x90x75	75x90x49	75x90x75	75x90x49	100x90x75	100x90x49	100x90x75	100x90x75	100x90x49
Order information	Art. no.	267126	271689	267128	271697	267129	271690	271654	267131	271686
										271698

* Sink type transistor output units on request.

Models mentioned above: FX3S-10MR/ES,FX3S-10MR/DS,FX3S-10MT/ESS,FX3S-10MT/DSS,FX3S-14MR/ES,FX3S-14MR/DS,FX3S-14MT/ESS,FX3S-14MT/DSS,FX3S-20MR/ES,FX3S-20MR/DS,FX3S-20MT/ESS,FX3S-

20MT/DSS,FX3S-30MR/ES,FX3S-30MR/DS,FX3S-30MR/ES-2AD,FX3S-30MT/ESS,FX3S-30MT/ESS-2AD,FX3S-30MT/DSS

✓ **FX3U/FX3UC**

Base units FX3U series

Base units with 16 I/Os

Specifications	FX3U-16 MR/DS	FX3U-16 MR/ES	FX3U-16 MT/DSS	FX3U-16 MT/ESS
Integrated inputs/outputs	16	16	16	16
Power supply	24 V DC	100–240 V AC	24 V DC	100–240 V AC
Integrated inputs	8	8	8	8
Integrated outputs	8	8	8	8
Output type	Relay	Relay	Transistor (source)*	Transistor (source)*
Power consumption	25 W	30 VA	25 W	30 VA
Weight	kg 0.6	0.6	0.6	0.6
Dimensions (WxHxD)	mm 130x90x86	130x90x86	130x90x86	130x90x86
Order information	Art. no. 231498	231486	231503	231492

Base units with 32 I/Os

Specifications	FX3U-32 MR/DS	FX3U-32 MR/ES	FX3U-32 MT/DSS	FX3U-32 MT/ESS
Integrated inputs/outputs	32	32	32	32
Power supply	24 V DC	100–240 V AC	24 V DC	100–240 V AC
Integrated inputs	16	16	16	16
Integrated outputs	16	16	16	16
Output type	Relay	Relay	Transistor (source)*	Transistor (source)*
Power consumption	30 W	35 VA	30 W	35 VA
Weight	kg 0.65	0.65	0.65	0.65
Dimensions (WxHxD)	mm 150x90x86	150x90x86	150x90x86	150x90x86
Order information	Art. no. 231499	231487	231504	231493

Note: Further special versions are available on request

* Sink type transistor output units on request.

Base units with 48 I/Os

Specifications	FX3U-48 MR/DS	FX3U-48 MR/ES	FX3U-48 MT/ESS	FX3U-48 MT/DSS
Integrated inputs/outputs	48	48	48	48
Power supply	24 V DC	100–240 V AC	100–240 V AC	24 V DC
Integrated inputs	24	24	24	24
Integrated outputs	24	24	24	24
Output type	Relay	Relay	Transistor (source)*	Transistor (source)*
Power consumption	35 W	40 VA	40 VA	35 W
Weight	kg 0.85	0.85	0.85	0.85
Dimensions (WxHxD)	mm 182x90x86	182x90x86	182x90x86	182x90x86
Order information	Art. no. 231500	231488	231494	231505

Base units with 64 I/Os

Specifications	FX3U-64 MR/DS	FX3U-64 MR/ES	FX3U-64 MT/ESS	FX3U-64 MT/DSS
Integrated inputs/outputs	64	64	64	64
Power supply	24 V DC	100–240 V AC	100–240 V AC	24 V DC
Integrated inputs	32	32	32	32
Integrated outputs	32	32	32	32
Output type	Relay	Relay	Transistor (source)*	Transistor (source)*
Power consumption	40 W	45 VA	45 VA	40 W
Weight	kg 1.0	1.0	1.0	1.0
Dimensions (WxHxD)	mm 220x90x86	220x90x86	220x90x86	220x90x86
Order information	Art. no. 231501	231489	231495	231506

Base units with 80–128 I/Os

Specifications	FX3U-80 MR/DS	FX3U-80 MR/ES	FX3U-80 MT/DSS	FX3U-80 MT/ESS	FX3U-128 MR/ES	FX3U-128 MT/ESS
Integrated inputs/outputs	80	80	80	80	128	128
Power supply	24 V DC	100–240 V AC	24 V DC	100–240 V AC	100–240 V AC	100–240 V AC
Integrated inputs	40	40	40	40	64	64
Integrated outputs	40	40	40	40	64	64
Output type	Relay	Relay	Transistor (source)*	Transistor (source)*	Relay	Transistor (source)*
Power consumption	45 W	50 VA	45 W	50 VA	65 VA	65 VA
Weight	kg 1.2	1.2	1.2	1.2	1.8	1.8
Dimensions (WxHxD)	mm 285x90x86	285x90x86	285x90x86	285x90x86	350x90x86	350x90x86
Order information	Art. no. 231502	231490	231507	231496	231491	231497

Note: Further special versions are available on request

* Sink type transistor output units on request.

Base units FX3UC series

Base units with 16–96 I/Os

Specifications	FX3UC-16 MT/DSS	FX3UC-32 MT/DSS	FX3UC-64 MT/DSS	FX3UC-96 MT/DSS
Integrated inputs/outputs	16	32	64	96
Power supply	24 V DC (+20 %, -15 %)	24 V DC (+20 %, -15 %)	24 V DC (+20 %, -15 %)	24 V DC (+20 %, -15 %)
Integrated inputs	8	16	32	48
Integrated outputs	8	16	32	48
Output type	Transistor (source)*	Transistor (source)*	Transistor (source)*	Transistor (source)*
Power consumption	W 6	8	11	14
Weight	kg 0.2	0.2	0.3	0.35
Dimensions (WxHxD)	mm 34x90x74	34x90x74	59.7x90x74	85.4x90x74
Order information	Art. no. 231508	231509	231510	231511

* Sink type transistor output units on request.

Models mentioned above: FX3U-16MR/DS,FX3U-16MR/ES,FX3U-16MT/DSS,FX3U-16MT/ESS,FX3U-32MR/DS,FX3U-32MR/ES,FX3U-32MT/DSS,FX3U-32MT/ESS,FX3U-48MR/DS,FX3U-48MR/ES,FX3U-48MT/DSS,FX3U-48MT/ESS,FX3U-65MR/DS,FX3U-65MR/ES,FX3U-65MT/DSS,FX3U-65MT/ESS,FX3U-80MR/DS,FX3U-80MR/ES,FX3U-80MT/DSS,FX3U-80MT/ESS,FX3U-128MR/ES,FX3U-128MT/ESS,FX3UC-16MT/DSS,FX3UC-32MT/DSS,FX3UC-64MT/DSS,FX3UC-96MT/DSS

➤ Расширения входов и выходов

Модули расширения входов и выходов обоих типов (с встроенным блоком сетевого питания и без него) предлагаются с различным количеством входов и выходов и в различных конфигурациях.



Технические характеристики

Powered extension units

Specifications	FX2N-32 ER-ES/UL	FX2N-32 ET-ESS/UL	FX2N-48 ER-DS	FX2N-48 ER-ES/UL	FX2N-48 ET-DSS	FX2N-48 ET-ESS/UL
Electrical data						
Integrated inputs/outputs	32	32	48	48	48	48
Power supply	AC range (+10%, -15%)	100–240V	100–240V	—	100–240V	—
	Frequency at AC	50/60	50/60	—	50/60	—
	DC range (+20%, -30%)	—	—	24V	—	24V
Max. input apparent power	—	35 VA	30 W	45 VA	30 W	45 VA
Inrush current at ON	100 V AC	40 A<5 ms	40 A<5 ms	—	40 A<5 ms	40 A<5 ms
	200 V AC	60 A<5 ms	—	—	60 A<5 ms	60 A<5 ms
Allowable momentary power failure time	ms	10	10	5	10	10
External service power supply (24 V DC)	mA	250	250	—	460	—
Power supply int. bus (5 V DC)	mA	690	690	690	690	690
Inputs						
Integrated inputs	16	16	24	24	24	24
Min. current for logical 1	mA	3.5	3.5	3.5	3.5	3.5
Max. current for logical 0	mA	1.5	1.5	1.5	1.5	1.5
Response time	For all extension units of the MELSEC FX2N series: 10 ms (at time of shipment)					
Outputs						
Integrated outputs	16	16	24	24	24	24
Output type	Relay	Transistor (source)	Relay	Relay	Transistor (source)	Transistor (source)
Switching voltage (max.)	Generally for relay version: <264 V AC, <30 V DC; for transistor version: 5–30 V DC					
Max. output current	- per output	A	2	0.5	2	0.5
	- per group *	A	8	0.8/1.6 ^①	8	0.8/1.6 ^②
Max. switching power	- inductive load	W	80	12	80	12
Response time	ms	10	<0.2	10	10	<0.2
Life of contacts (switching times) ^①	For all extension units of the MELSEC FX2N series: 3,000,000 at 20VA; 1,000,000 at 35 VA; 200,000 at 80 VA (for relay output only)					
Mechanical data						
Weight	kg	0.65	0.65	0.85	0.85	0.85
Dimensions (WxHxD)	mm	150x90x87	150x90x87	182x90x87	182x90x87	182x90x87
Order information	Art. no.	65568	65569	66633	65571	66634

① Not guaranteed by Mitsubishi Electric

② 0.8 for 4 per group and 1.6 for 8 per group

* This limitation applies only per reference terminal for each group. Please observe the terminal assignments for the group identification.

Unpowered extension units

Specifications	FX2N-8 ER-ES/UL	FX2N-8 EX-ES/UL	FX2N-8 EYR-ES/UL	FX2N-8 EYT-ESS/UL	FX2N-16 EX-ES/UL	FX2N-16 EYR-ES/UL	FX2N-16 EYT-ESS/UL
Electrical data							
Integrated inputs/outputs	8	8	8	8	16	16	16
Nbr. of occupied I/O points in the PLC	16	8	8	8	16	16	16
Power supply	All modular extension blocks are supplied by the base unit.						
Inputs							
Integrated inputs	4	8	—	—	16	—	—
Min. current for logical 1	mA	3.5	3.5	—	—	3.5	—
Max. current for logical 0	mA	1.5	1.5	—	—	1.5	—
Response time	For all extension blocks of the MELSEC FX2N series: 10 ms (at time of shipment)						

Outputs		4	—	8	8	—	16	16	
Integrated outputs		4	—	8	8	—	16	16	
Output type		Relay	—	Relay	Transistor	—	Relay	Transistor (source)	
Switching voltage (max.)		Generally for relay version: <240 V AC, <30 V DC; for transistor version: 5–30 V DC							
Max. output current	- per output	A	2	—	2	0.5	—	2	0.5
	- per group ^①	A	8	—	8	0.8	—	8	1.6
Max. switching power	- inductive load	VA	80	—	80	12	—	80	12
Response time		ms	10	10	10	<0.2	—	10	<0.2
Life of contacts (switching times) ^②		For all extension units of the MELSEC FX2N series: 3,000,000 at 20VA; 1,000,000 at 35 VA; 200,000 at 80 VA (for relay output only)							
Mechanical data									
Weight	kg	0.2	0.2	0.2	0.2	0.3	0.3	0.3	
Dimensions (WxHxD)	mm	43x90x87	43x90x87	43x90x87	43x90x87	40x90x87	40x90x87	40x90x87	
Order information	Art. no.	166285	166284	166286	166287	65776	65580	65581	

① This limitation applies only per reference terminal for each group. Please observe the terminal assignments for the group identification.

② Not guaranteed by Mitsubishi Electric

Note: To connect these modules to a FX3GC base unit, an adapter FX2N-CHV-IF or a power supply FX3UC-1PS-5V is required.

Unpowered extension modules

Specifications	FX2NC-16 EX-T-DS	FX2NC-16 EYR-T-DS	FX2NC-16 EX-DS	FX2NC-16 EYT-DSS	FX2NC-32 EX-DS	FX2NC-32 EYT-DSS	
Electrical data							
Integrated inputs/outputs	16	16	16	16	32	32	
Power supply	All modular extension blocks are supplied by the base unit.						
Inputs							
Integrated inputs	16	—	16	—	32	—	
Input current X0→X7 / X10→∞	7/5	—	7/5	—	7/5	—	
Min. current for logical 1 X0→X7/X10→∞	4.5/3.5	—	4.5/3.5	—	4.5/3.5	—	
Max. current for logical 0	1.5	—	1.5	—	1.5	—	
Isolation	Photocoupler isolation between input terminals and PC power for all base units						
Response time	For all extension units of the MELSEC FX2NC series: 10 ms (at time of shipment), partly adjustable between 0 and 60 ms in 1 ms steps (REFF, FNCS1 = 0–60 ms)						
Outputs							
Integrated outputs	—	16	—	16	—	32	
Output type	—	Relay	—	Transistor	—	Transistor	
Switching voltage (max.)	V Generally for relay version: <240 V AC, <30 V DC; for transistor version: 5–30 V DC						
Max. output current	- per output	A	2	—	0.1/0.3 ^①	—	0.1/0.3 ^①
	- per group*	A	4/8	—	0.8	—	0.8
Max. switching power	- inductive load	VA	80	—	2.4/7.2 ^②	—	2.4/7.2 ^②
	- lamp load	W	100	—	0.3/0.9 ^③	—	0.3/0.9 ^③
Response time	ms	10	—	<0.2	—	<0.2	
Life of contacts (switching times)	—	like base unit	—	—	—	—	
Mechanical data							
Connection type	Removable screw terminal blocks		Ribbon cable connector	Ribbon cable connector	Ribbon cable connector	Ribbon cable connector	
Weight	kg	0.2	0.2	0.15	0.2	0.2	
Dimensions (WxHxD)	mm	20.2x90x89	24.2x90x89	14.6x90x87	14.6x90x87	26.2x90x87	
Order information	Art. no.	128152	128153	104503	104504	104505	104506

① 0.3 A for Y0 to Y1; 0.1 A all others ② 7.2 W for Y0 to Y3; 2.4 W all others ③ 0.9 W for Y0 to Y3; 0.3 W all others

* This limitation applies only per reference terminal for each group. Please observe the terminal assignments for the group identification.

Note: These modules can be combined with PLC base units of the FX3GC or FX3UC series!

Models mentioned above: FX2N-32ER-ES/UL, FX2N-32ET-ESS/UL, FX2N-48ER-DS, FX2N-48ER-ES/UL, FX2N-48ET-DSS, FX2N-48ET-ESS/UL, FX2N-8ER-ES/UL, FX2N-8EX-ES/UL, FX2N-8EVR-ES/UL, FX2N-8EYT-ESS/UL, FX2N-16EX-ES/UL, FX2N-16EYR-ES/UL, FX2N-16EYT-ESS/UL, FX2NC-16EX-T-DS, FX2NC-16EYR-T-DS, FX2NC-16EX-DS, FX2NC-16EYT-DSS, FX2NC-32EEX-DS, FX2NC-32EYT-DSS

➤ Аналоговые модули

Имеются модули для приема или вывода аналоговых сигналов, приема сигналов температуры и регулирования температуры.



Технические характеристики

Analog Input modules

Specifications		FX2N-2AD	FX3U-4AD	FX3UC-4AD	FX2N-8AD
Applicable for		Base units FX3G/FX3GC/FX3GE/ FX3U/FX3UC	Base units FX3G/FX3GC/FX3GE/ FX3U/FX3UC/ FX5U/FX5UC	Base units FX3GC/FX3UC	Base units FX3G/FX3GC/FX3GE/ FX3U/FX3UC
Analog channels	Inputs	2	4	4	8
	Outputs	—	—	—	—
Analog input range		0—+10 V DC/ 0—+5 V DC/ 0/4—+20 mA	-10—+10 V DC/ -20—+20 mA/ 4—+20 mA	-10—+10 V DC/ -20—+20 mA/ 4—+20 mA	-10—+10 V DC/ -20—+20 mA/ 4—+20 mA
Resolution	Voltage	2.5 mV, 1.25 mV/ 4 μ A (12 bit)	0.32 mV (16 bit + sign)	0.32 mV (16 bit + sign)	0.63 mV (14 bit + sign)
	Current		1.25 μ A (15 bit + sign)	1.25 μ A (15 bit + sign)	2.5 μ A (13 bit + sign)
Fullscale overall accuracy		$\pm 1\%$	$\pm 0.3-1\%$ ^①	$\pm 0.3-1\%$ ^①	$\pm 0.3-0.5\%$ ^①
Power supply	5 V DC	20 mA (from base unit)	110 mA (from base unit)	100 mA (from base unit)	50 mA (from base unit)
	24 V DC	50 mA (from base unit)	90 mA	80 mA	80 mA
Related I/O points		8	8	8	8
Weight	kg	0.3	0.2	0.13	0.4
Dimensions (WxHxD)	mm	43x90x87	55x90x87	20.2x90x79	75x105x75
Order information	Art. no.	102869	169508	210090	129195

① Dependent on the ambient temperature

② Please refer to manuals for further details of specification of temperature detectors.

Notes: The FX2N-8AD can be configured to accept standard analog inputs as well as selected temperature inputs such as K, T or J type thermocouples.

To connect these modules to a FX3UC or FX3GC base unit, an adapter FX2N-CNV-IF or a power supply FX3UC-1PS-5V is required.

For the connection of a FX3U-4AD to a FX5U/FX5UC base unit, a bus conversion module FX5-CNV-BUSC resp. FX5-CNV-BUS is required.

Analog output modules

Specifications		FX2N-2DA	FX3U-4DA
Applicable for		Base units FX3G/FX3GC/FX3GE/FX3U/FX3UC	Base units FX3G/FX3GC/FX3GE/FX3U/FX3UC
Analog channels	Inputs	—	—
	Outputs	2	4
Analog output range		0—+10 V DC/ 0—+5 V DC/ 4—+20 mA	-10—+10 V DC/ 0—+20 mA/ 4—+20 mA
	Voltage	2.5 mV (12 bit)	0.32 mV (16 bit + sign)
	Current	4 μ A (12 bit)	0.63 μ A (15 bit)
Fullscale overall accuracy		± 1 %	± 0.3 — 0.5 %*
Power supply	5 V DC	30 mA (from base unit)	—
	24 V DC	85 mA (from base unit)	160 mA
Related I/O points		8	8
Weight	kg	0.3	0.2
Dimensions (WxHxD)	mm	43x90x87	55x90x87
Order information	Art. no.	102868	169509

* Dependent on the ambient temperature

Notes: To connect these modules to a FX3UC or FX3GC base unit, an adapter FX2N-CNV-IF or a power supply FX3UC-1PS-5V is required.
For the connection of a FX3U-4DA to a FX5U/FX5UC base unit, a bus conversion module FX5-CNV-BUSC resp. FX5-CNV-BUS is required.

Combined analog I/O module

Specifications		FX2N-5A
Analog channels	Inputs	4
	Outputs	1
Input (resolution)	Voltage	-10—+10 V (15 bit + sign), -100—+100 mV (11 bit + sign)
	Current	-20—+20 mA (14 bit + sign), 0/4—+20 mA (14 bit)
Output (resolution)	Voltage	-10—+10 V (12 bit)
	Current	0/4—+20 mA (10 bit)
Fullscale overall accuracy		± 0.3 — 1 %*
Power supply	5 V DC	70 mA (from base unit)
	24 V DC	90 mA
Related I/O points		8
Weight	kg	0.3
Dimensions (WxHxD)	mm	55x90x87
Order information	Art. no.	153740

Note: To connect the module to a FX3UC or FX3GC base unit, an adapter FX2N-CNV-IF or a power supply FX3UC-1PS-5V is required.

Analog temperature input adapters

Specifications	FX3U-4AD-TC-ADP	FX3U-4AD-PT-ADP	FX3U-4AD-PTW-ADP	FX3U-4AD-PNK-ADP
Applicable for	Base units FX3S, FX3G, FX3GC, FX3GE, FX3U, FX3UC			
Analog inputs	4 (thermocouples, J or K type)	4 (Pt100)	4 (Pt100)	4 (Pt1000 or Ni1000)
Compensated temperature range °C	-100—+600 (J)/ -100—+1000 (K)	-50—+250	-100—+600	-50—+250 (Pt1000)/ -40—+110 (Ni1000)
Digital outputs	-1000—+6000 (J)/ -1000—+10000 (K)	-500—+2500	-1000—+6000	-500—+2500 (Pt1000)/ -400—+1100 (Ni1000)
Resolution °C	0.3 (J)/0.4 (K)	0.1	0.2–0.3	0.1
Fullscale overall accuracy	±0.5 % (fullscale)	±0.5–1.0 % (fullscale)*		
Power supply	5 V DC	15 mA (from base unit)	15 mA (from base unit)	15 mA (from base unit)
	24 V DC	45 mA	50 mA	50 mA
Related I/O points	0	0	0	0
Weight kg	0.1	0.1	0.1	0.1
Dimensions (WxHxD) mm	17.6x90(106)x89.5			
Order information	Art. no.	165273	165272	214173
			214172	

* Dependent on the ambient temperature

Notes: When connecting the FX3 analog adapters to a FX3G, FX3S or FX3U base unit, a communications adapter is required. A direct connection without adapter is possible if these modules are connected to a FX3GC, FX3GE or FX3UC base unit.

Analog I/O adapters

Specifications	FX3U-4AD-ADP	FX3U-4DA-ADP	FX3U-3A-ADP
Analog channels	Inputs	4	—
	Outputs	—	4
Analog range	0—+10 V DC, 4—+20 mA	0—+10 V DC, 4—+20 mA	0—+10 V CC, 4—+20mA
Resolution	2.5 mV/10 µA (12 bit/11 bit)	2.5 mV/4 µA (12 bit)	2.5 mV/4 µA (12 bit)
Overall accuracy	±0.5 % */±1 %	±0.5 % */±1 %	±0.5–1 %*
Power supply	5 V DC	15 mA (from base unit)	15 mA (from base unit)
	24 V DC	40 mA	150 mA
Related I/O points	0	0	0
Weight kg	0.1	0.1	0.1
Dimensions (WxHxD) mm	17.6x90(106)x89.5		
Order information	Art. no.	165241	165271
			221549

* Dependent on the ambient temperature and signal quality

Notes: When connecting the analog adapters to a FX3G, FX3S or FX3U base unit, a communications adapter is required. A direct connection without adapter is possible if these modules are connected to a FX3GC, FX3GE or FX3UC base unit.

Temperature control modules

Specifications		FX3U-4LC
Applicable for		Base units FX3G, FX3GC, FX3GE, FX3U, FX3UC,
Analog inputs		4 (Thermocouple and Pt100 sensors)
Compensated temperature range	°C	-200—+2300
Digital outputs		4 NPN transistor open collector output points
Resolution	°C	0.1 or 1
Fullscale overall accuracy		±0.3–0.7 % (fullscale, dependent on the ambient temperature)
Power supply	5 V DC	160 mA (from base unit)
	24 V DC	50 mA
Related I/O points		8
Dimensions (WxHxD)	mm	90x90x86
Order information		Art. no. 232806

Notes: To connect these modules to a FX3UC or FX3GC base unit, an adapter FX2N-CNV-IF or a power supply FX3UC-1PS-5V is required.
For the connection of a FX3U-4LC to a FX3U/FX3UC base unit, a bus conversion module FX5-CNV-BUSC resp. FX5-CNV-BUS is required.

Models mentioned above: FX2N-2AD, FX3U-4AD, FX3UC-4AD, FX2N-8AD, FX2N-2DA, FX3U-4DA, FX2N-5A, FX3U-4AD-TC-ADP, FX3U-4AD-PT-ADP, FX3U-4AD-PTW-ADP, FX3U-4AD-PNK-ADP, FX3U-4AD-ADP, FX3U-4DA-ADP, FX3U-3A-ADP, FX3U-4LC

➤ Высокоскоростные счетчики



Встроенные высокоскоростные счетчики можно дополнить модулями счетчиков более высокой емкости или с более высокими показателями.

Технические характеристики

Specifications		FX2N-1HC	FX2NC-1HC*	FX3U-4HSX-ADP**	FX3U-2HSY-ADP**	FX3U-2HC
Signal level		5, 12, 24 V DC/7 mA	5 V DC	Differential line driver	5, 12, 24 V DC	
Counter	inputs	2 (1 phase) or 1 (2 phase)	4	—	—	2
	outputs	—	—	2	2	—
Max. frequency	inputs kHz	50	100/200	—	100/200	—
	outputs kHz	—	—	200	—	—
Counting range (Up/down & ring counter)	16 bit	0–65535	—	—	—	0–65535
	32 bit	-2147483648—+2147483647	—	—	—	-2147483648—+2147483647
Output		5–24 V DC; 0.5 A	—	less than 25 mA	5–24 V DC; 0.5 A	
Power supply	5 V DC	90 mA (from base unit)	30 mA (from base unit)	245 mA (from base unit)		
	24 V DC	—	30 mA (from base unit)	60 mA (from base unit)	—	
Related I/O points		8	0	0	8	
Dimensions (WxHxD)	mm	55x90x87	20.2x90x89	17.6x90 (106)x89.5	17.6x90 (106)x89.5	55x90x87
Order information		Art. no. 65584	217916	165274	165275	232805

*for FX3UC only ** for FX3U only

Models mentioned above: FX2N-1HC, FX2NC-1HC, FX3U-4HSX-ADP, FX3U-2HSY-ADP, FX3U-2HC

➤ Позиционирование



Имеются модули для вывода быстрых выходных импульсов и модуль для подключения к коммуникационной сети позиционирования SSCNETIII.

Технические характеристики

Specifications	FX3U-1PG	FX2N-10PG
Accessible axes	1	1
Output frequency pulse/s	10–200 000	1–1 000 000
Signal level for digital inputs	24 V DC/40 mA	5 V DC/100 mA; 24 V DC/70 mA
Power supply	5 V DC 24 V DC	150 mA (from base unit) 120 mA (from base unit)
Related I/O points	8	8
Dimensions (WxHxD) mm	43x90x87	43x90x87
Order information	Art. no. 259298	140113

Specifications	FX3U-20SSC-H
Accessible axes	2 (independent or interpolation) via SSCNETIII (servo bus)
Output frequency	1 Hz to 50 MHz
Communications speed	50 Mbps
Starting time ms	1.6 (+1.7 SSCNET cycle time)
Max. to PLC connectable modules	Up to 8 can be connected to the FX3U PLC
Power supply	5 V DC 24 V DC
Related I/O points	8
Dimensions (WxHxD) mm	55x90x87
Order information	Art. no. 206189

Note: The FX3U-20SSC-H can only be used in combination with a FX3U/FX3UC series base unit. For applicable servo amplifiers and motors please refer to the MR-J3 servo section of this catalogue.

Models mentioned above: FX3U-1PG, FX2N-10PG, FX3U-20SSC-H

➤ Сетевая коммуникация



Эти расширения позволяют подключить контроллер к сети CC-Link или Ethernet или предоставляют пользователю последовательный интерфейс RS-232C или RS-485.

Технические характеристики

Specifications	FX3U-64DP-M	FX3U-32DP
Module type	Master	Slave
Transmission type	Bus network	
Transmission data	32 byte/slave (normal service mode) 244 byte/slave (extended service mode)	
Interface	Profibus DP (with 9 pole D-Sub connector)	
Max. number of master per configuration	1	—
Repeaters	3	—
Max. number of slaves	64	—
Communications speed	Profibus standard	
Communications distance	m Max. 1,200 (depends on communication speed)	
Communication cable	Profibus cable with 9-pin D-Sub connector	
Power supply	5 V DC	—
	24 V DC	Max. 155 mA (from base unit) 145 mA (from base unit)
Related I/O points	8	8
Dimensions (WxHxD)	mm 43x90x87	43x90x87
Order information	Art. no. 166085	194214

*Note: the FX3U-64DP-M can be used in combination with a FX3U/FX3UC base unit only.
The FX3U-32DP can be used in combination with FX3G/FX3U/FX3UC base unit only.

Specifications	FX3U-ENET/FX3U-ENET-P502
Protocol	TCP/IP, UDP
Communication mode	Full-duplex/half-duplex
No. of simultaneous open connections	8
Fixed buffer communication	1023 word x 8
Communication with mail server	SMTP, POP3
Interface	IEEE802.3u (100BaseTX), IEEE802.3 (10BaseT)
Connector	RJ45
Max. transfer rate	100 Mbps, 10 Mbps
Max. segment length	m 100
Cable	CAT5 STP or 3 STP
Power supply	24 V DC/240 mA (from base unit)
Related I/O points	8
Dimensions (WxHxD)	mm 55x90x87
Order information	Art. no. 166086/225142

Specifications	FX3U-16CCL-M	FX2N-32CCL	FX3U-64CCL*
Module type	Master station	Remote station	Intelligent station
Link points per station	I/O points	32	64
	register	8	16
Max. number of I/O points	FX3G: 32 x number of stations ≤128 FX3U/FX3UC: 32 x number of stations ≤256**	—	—
Number of connectable modules	Max. 16	—	1–4
Power supply	5 V DC	—	Max. 130 mA (from base unit) —
	24 V DC	240 mA	50 mA 220 mA
Related I/O points	8	8	8
Dimensions (WxHxD)	mm 55x90x87	43x90x87	55x90x87
Order information	Art. no. 248224	102961	217915

Note: Refer to the Network section of this catalog for I/O blocks and power supply units.

* for FX3G/FX3U/FX3UC only ** Total number of I/O points of the base unit and extension units and inside the CC-Link network ≤384.

Specifications		FX3U-CAN
Module type		CANopen master
CANopen communication standard		CI A 301 V4.2, CI A 302 V4.1, CI A 305 V2.2
CANopen Lift application profile mode		CI A 417 V2.1
CANopen PLC device profile mode		CI A 405 V2.0
Max. number of modules that can be connected to the network		30 without repeater; 127 with repeater
Station numbers		1–127
Supported communication speeds		kbps 10, 20, 50, 125, 250, 500, 800, 1000
Status displays		RUN, Error, Power, Network status
Power supply		290 mA
5 V DC		—
24 V DC		—
Related I/O points		8
Weight		kg 0.2
Dimensions (WxHxD)		mm 43x90x88.7
Order information		Art. no. 252845

Notes: To connect this module to a FX3UC/FX3GC base unit, an adapter FX2NC-CNV-IF or a power supply FX3UC-1PS-5V is required.
For the connection of a FX3U-CAN to a FX5U/FX5UC base unit, a bus conversion module FX5-CNV-BUSC resp. FX5-CNV-BUS is required.

Specifications		FX3U-J1939
Communication standard version		SAE J1939
Network node size		SAE J1939: 2–30
Communication method		Cyclic, acyclic or request driven (user configurable)
CAN layer-2 communication		Send and receive
Max. cable length		m 5000
Baud rates		kbit/s 10, 20, 50, 100, 125, 250, 500, 800, 1000
Power supply		24 V DC/110 mA (from base unit)
Weight		kg 0.2
Dimensions (WxHxD)		mm 43x90x95
Order information		Art. no. 254276

Note: To connect this module to a FX3UC base unit, an adapter FX2NC-CNV-IF or a power supply FX3UC-1PS-5V is required.

Specifications		FX3U-ENET-ADP
Protocol		TCP/IP
No. of simultaneous open connections		1
Interface		IEEE802.3u (100BaseTX), IEEE802.3 (10BaseT)
Connector		RJ45 (to Ethernet), 3 screw terminals (to ground)
Max. transfer rate		10 Mbit/s, 100 Mbit/s
Cable		CAT5 STP or 3 STP
Power supply		30 mA (from base unit)
5 V DC		—
24 V DC		—
Related I/O points		0
Weight		kg 0.1
Dimensions (WxHxD)		mm 23x90(106)x81.5
Order information		Art. no. 248844

Notes: This module can be connected directly (without adapter) to a base unit of the FX3GC or FX3UC series. To connect this module to a FX3G, FX3S or FX3U base unit, an adapter is required.

Specifications		FX2N-32DP-IF-D	
Power supply		24 V DC (+20 %/-30 %)	
Power consumption		14 W	
Internal current consumption		5 V DC/max. 220 mA (from base unit)	
Interface (connectors)		9-pin D-SUB for Profibus DP, 8-pin Mini-DIN for PC or programming unit FX-10P/FX-20P/FX-30P	
Communication speed	1200 m	kbps	9.6/19.2/45.45/93.75
	1000 m	kbps	187.5
	400 m	kbps	500
	200 m	kbps	1500
	100 m	kbps	3000/6000/12000
Communication distance	m	Max. 1200 (depends on communication speed)	
Communication cable		Profibus cable with 9-pin D-SUB connector	
Max. number of controllable I/O points		256	
Weight	kg	0.4	
Dimensions (WxHxD)	mm	75x98x87	
Order information		Art. no.	142763

Specifications		FX2N-64DNET	
Module type		Slave (group 2)	
Node type		G2 server	
Station numbers		0–63 points	
Supported communication speeds	kbps	125/250/500	
Communication data (open connection)	Master/slave	no. of connections	1 connection (group 2)
		transfer time-out	2,000 ms (ACK time-out)
	UCMM client/server	no. of connections	63/63 (group 1, 3)
Communication data (I/O connection)		data length	Max. 64 bytes per connection
		type	Polling, cyclic, change of state
		data length	Max. 64 bytes (fragmentation is possible)
Module ID code		K 7090	
Status displays		Power, module status, network status	
Related I/O points		8	
Power supply	5 V DC	120 mA	
	24 V DC	50 mA	
Weight	kg	0.2	
Dimensions (WxHxD)	mm	43x90x87	

Specifications		FX3U-485ADP-MB	
Interface		RS485; Modbus® RS485	
Communication speed*	kbps	0.3–19.2	
Max. communication distance	m	500	
Power supply	5 V DC	20 mA (from base unit)	
	24 V DC	—	
Related I/O points		0	
Dimensions (WxHxD)	mm	17.6x90(106)x74	
Order information		Art. no.	206191

* The communication method and communication speed vary depending upon the communication type.

Notes: This adapter module can be connected directly (without special adapter) to a base unit of the FX3GC, FX3GE or FX3UC series. To connect this adapter module to a FX3G, FX3S or FX3U base unit, an adapter is required.

Specifications		FX3U-232ADP-MB
Interface		RS232C with 9 pole D-SUB connector (photocoupler isolation)
Communication speed*	kbps	0.3–115.2
Power supply	5 V DC	30 mA (from base unit)
	24 V DC	—
Related I/O points		0
Weight	kg	0.08
Dimensions (WxHxD)	mm	17.6x90(106)x81.5
Order information		Art. no. 206190

* The communication method and communication speed vary depending upon the communication type.

Notes: This module can be connected directly (without adapter) to a base unit of the FX3GC, FX3GE or FX3UC series. To connect this module to a FX3G, FX3S or FX3U base unit, an adapter is required.

Specifications		FX2N-232IF
Interface		RS232C with 9 pole D-SUB connector (photocoupler isolation)
Communication speed	kbps	0.3–19.2
Communication distance	m	Max. 15
Communication cable		Shielded cable
Communication mode		Full duplex
Protocols		Non protocol mode/start stop synchronisation
Send and receive buffer		512 byte each
Format		7 or 8 bits, parity none/even/odd, stop bits: 1 or 2
Power supply	5 V DC	40 mA (from base unit)
	24 V DC	80 mA
Related I/O points		8
Weight	kg	0.3
Dimensions (WxHxD)	mm	55x90x87
Order information		Art. no. 66640

Note: To connect this module to a FX3UC base unit, an adapter FX2NC-CNV-IF or a power supply FX3UC-1PS-5V is required.

Models mentioned above: FX3U-64DP-M,FX3U-32DP,FX0N-32NT-DP,FX3U-ENET,FX3U-ENET-P502,FX3U-16CCL-M,FX2N-32CCL,FX3U-64CCL,FX3U-CAN,FX3U-J1939,FX3U-ENET-ADP,FX2N-32DP-IF-D,FX2N-64DNET,FX3U-485ADP-MB,FX3U-232ADP-MB,FX2N-232IF

➤ Опция



Мы предлагаем обширный перечень кабелей и преобразователей сигналов, а также учебное программное обеспечение.

Технические характеристики

Specifications		FX3G-4EX-BD	FX3G-2EYT-BD
Integrated inputs/outputs		4	4
Power supply		From base unit	
Integrated inputs		4	—
Integrated outputs		—	2
Input level	Voltage	24 V DC (+20 %/-15 %)	
	Current	5 mA (24 V DC)	
Output type		—	Transistor
Max. switching voltage	V	—	5–30 V DC
Weight	kg	0.02	0.02
Dimensions (WxHxD)	mm	35x51.2x29.2	35x51.2x29.2
Order information		Art. no. 271700	271701

Specifications		FX3G-2AD-BD	FX3G-1DA-BD
Power supply		From base unit	From base unit
Analog channels	Inputs	2	—
	Outputs	—	1
Analog input range		0—+10 V DC/4—+20 mA	0—+10 V DC/4—+20 mA
Input resistance	Voltage input	k Ω 198.7	—
	Current input	Ω 250	—
External load	Voltage output	k Ω —	2—1,000
	Current output	Ω —	<500
Resolution		2.5 mV (12 bit)/8 μ A (11 bit)	2.5 mV (12 bit)/8 μ A (11 bit)
Fullscale overall accuracy		\pm 1 %	\pm 1 %
Conversion speed	Analog \rightarrow digital	180 μ s (1 program cycle)	—
	Digital \rightarrow analog	—	60 μ s (1 program cycle)
Related I/O points		0	0
Weight	kg	0.02	0.02
Dimensions (WxHxD)	mm	35x51.2x29.2	35x51.2x29.2
Order information	Art. no.	221265	221266

Specifications		FX3G-8AV-BD	FX3U-8AV-BD
Applicable for		Base units FX3S/FX3G/FX3GE	Base units FX3U
Power supply		From base unit	From base unit
Adjusting range		8 Bit	8 Bit
Related I/O points		0	0
Potentiometer evaluation		Via application instruction from the PLC CPU (FNC 85/86)	
Weight	kg	0.02	0.02
Dimensions (WxHxD)	mm	35x51.2x12	19.6x46.1x53.5
Order information	Art. no.	221267	237307

Specifications		FX3U-USB-BD
Applicable for		Base units FX3U
Power supply		5 V DC (from base unit)
Weight	kg	0.02
Dimensions (WxHxD)	mm	19.6x46.1x53.5
Order information	Art. no.	165284

Specifications		FX3G-CNV-ADP	FX3S-CNV-ADP	FX3U-CNV-BD
Applicable for		Base units FX3G	Base units FX3S	Base units FX3U
Weight	kg	0.1	0.1	0.01
Dimensions (WxHxD)	mm	90x14.6x86	90x14.6x74	19.6x46.1x53.5
Order information	Art. no.	221268	267132	165285

Specifications		FX3G-232-BD	FX3U-232-BD
Applicable for		Base units FX3S/FX3G/FX3GE	Base units FX3U
Interface		RS232C with 9 pole D-SUB connector	RS232C with 9 pole D-SUB connector
Power supply		5 V DC/20 mA (from base unit)	5 V DC/20 mA (from base unit)
Related I/O points		—	—
Weight	kg	0.02	0.02
Dimensions (WxHxD)	mm	35x51.2x17.2	19.3x46.1x62.7
Order information	Art. no.	221254	165281

Specifications		FX3G-422-BD	FX3U-422-BD
Applicable for		Base units FX3S/FX3G/FX3GE	Base units FX3U
Interface		RS422 with 8 pole mini DIN connector	RS422 with 8 pole mini DIN connector
Power supply		5 V DC/20 mA (from base unit)	5 V DC/20 mA (from base unit)
Related I/O points		—	—
Weight	kg	0.02	0.02
Dimensions (WxHxD)	mm	35x51.2x14.9	19.6x46.1x53.5
Order information	Art. no.	221252	165282

Specifications		FX3G-485-BD	FX3G-485-BD-RJ	FX3U-485-BD
Applicable for		Base units FX3S/FX3G/FX3GE		Base units FX3U
Interface		RS485	RS485	RS485
Power supply		5 V DC/20 mA (from base unit)	5 V DC/20 mA (from base unit)	5 V DC/40 mA (from base unit)
Related I/O points		—	—	—
Weight	kg	0.02	0.02	0.02
Dimensions (WxHxD)	mm	35x51.2x29.2	35x51.2x22	19.6x46.1x69
Order information	Art. no.	221253	271699	165283

Specifications		FX2NC-CNV-IF
Bus connection		FX3UC bus to FX0N/FX2N/FX3U bus
Weight	kg	0.5
Dimensions (WxHxD)	mm	14.6x90x74
Order information	Art. no.	104508

Specifications		FX3G-EEPROM-32L
Memory type		EEPROM
Size		32,000 steps (4,000 steps for FX3S)
Protect switch		Provided
Data transfer buttons		Provided
Order information	Art. no.	221269

Specifications		FX3U-FLROM-16	FX3U-FLROM-64	FX3U-FLROM-64L
Applicable for		Base units FX3U/FX3UC	Base units FX3U/FX3UC	Base units FX3U/FX3UC
Size		16,000 steps	64,000 steps	64,000 steps
Memory type		Flash memory	Flash memory	Flash memory
Protect switch		Provided	Provided	Provided
Data transfer buttons		—	—	Provided
Dimensions (WxHxD)	mm	37x20x6.1	37x20x6.1	37x20x6.1
Order information	Art. no.	165278	165279	165280

Specifications		FX3U-1PSU-5V	FX3UC-1PS-5V
Application		Power supply for the FX3G/FX3GE/FX3U/FX5U system bus	Power supply for the FX3GC/FX3UC system bus
General specifications		Conforms to FX family base units	
Nominal input voltage		100–240 V (50/60 Hz)	24 V DC (+20 %/-15 %)
Output voltage		5 V DC/24 V DC	5 V DC
Max. output current	5 V DC	1 A at 40 °C; 0.8 A at 55 °C	1 A
	24 V DC	0.3 A at 40 °C; 0.2 A at 55 °C	—
Ambient temperature		-25—+55 °C (operation), -40—+85 °C (storage)	
Ambient humidity		Max. 95 % (no condensation)	
Weight	kg	0.3	0.15
Dimensions (WxHxD)	mm	55x90x87	24x90x74
Order information		Art. no. 169507	210091

Notes: The FX3U-1PSU-5V can't be used with a 24V base unit!

When connecting an input extension module (incl. FX2N-8ER-E5/UL, FX2N-8ER) to the FX3U-1PSU-5V, supply the power for it from the 24 V DC service power supply of the connected main unit or powered extension unit on the upstream side.

Connection cable for peripherals

Specifications		F2-232CAB-1	FX-422CAB0	FX-422CAB
Application		PC to FX-232AWC-H		
Peripheral type		RS232C	RS422	RS422
Length	m	3.0	1.5	0.3
Order information		Art. no. 76163	76094	25949

Connection cable for programming unit

Specifications		FX-20P-CADP
Application		FX-20P-CAB to FX□□ PLC
Length	m	0.3
Order information		Art. no. 31870

Connection cable for extension bus

Specifications		FX0N-6SEC	FX2N-CNV-BC
Application		PLC bus cable for two-stage-configuration with extension units FX□□-□□ES	Adapter for the connection of the FX0N-6SEC to special function modules FX3U/FX2N
Length	m	0.65	
Order information		Art. no. 45348	70880

Interface converter

Specifications		FX-USB-AW	FX-232AWC-H
Application		USB to RS422 converter	RS422 to RS232C converter
Dimensions (WxHxD)	mm	62x21x15	80x60x25
Order information		Art. no. 165288	159642

Specifications	FX2NC-32BL	FX3U-32BL
Applicable for	FX2N-20GM module	Base units FX3G/FX3GC/FX3GE/FX3U/FX3UC/ FX5U/FX5UC
Order information	Art. no. 128725	165286

FX-USB-AW	
Connection on PC side	USB
Order information	Art. no. 165288

Specifications	FX3S-5DM	FX3G-5DM
Applicable for	Base units FX3S	Base units FX3G/FX3GE
Display	LCD (with backlight)	LCD (with backlight)
Power supply	5 V DC $\pm 5\%$ (from base unit)	5 V DC $\pm 5\%$ (from base unit)
Current consumption	mA n/a	n/a
Dimensions (WxHxD)	mm 35x51.2x12	49x34x12
Order information	Art. no. 282202	221270

FX-10DM-E	
Applicable for	All base units FX3U
Display	LCD (with backlight)
Resolution	2x16 signs (80x16 pixdes)
Power supply	5 V DC $\pm 5\%$ (from base unit)
Current consumption	mA 220
Weight	kg 0.02
Dimensions (WxHxD)	mm 96x62x32

Specifications	FX3U-7DM	FX3U-7DM-HLD
Applicable for	Base units FX3U	Base units FX3U
Display	16 letters x 4 lines	—
Resolution	—	—
Power supply	5 V DC (from base unit)	—
Current consumption	mA 20	—
Extension cable	—	Included
Weight	kg 0.02	0.01
Dimensions (WxHxD)	mm 48x35x11.5	66.3x41.8x13
Order information	Art. no. 165268	165287

FX3U-CF-ADP	
Data access method	Controlled by the main unit, no polling from the logging unit possible.
Connectable units	A maximum of one FX3U-CF-ADP can be connected per PLC.
Time stamp function	The real time clock data of the base unit is used.
Recommended storage media	CompactFlash memory card (GT05-MEM-256MC, -512MC, -1GC, -2GC)
Max. file size	512 MB
File format	CSV
Max. numbers of files	63 (Plus one FIFO file.)
FIFO function	One pattern (The file name gets automatically generated.)
Power supply	24 V DC 130 mA
Related I/O points	kg 0
Dimensions (WxHxD)	mm 45x90x89.5
Order information	Art. no. 230104

Models mentioned above: FX3G-4EX-BD, FX3G-2EYT-BD, FX3G-2AD-BD, FX3G-1DA-BD, FX3G-8AV-BD, FX3U-8AV-BD, FX3U-USB-BD, FX3G-CNV-ADP, FX3S-CNV-ADP, FX3U-CNV-BD, FX3G-232-BD, FX3U-232-BD, FX5-232-BD, FX3G-422-BD, FX3U-422-BD, FX5-422-BD-GOT, FX3G-485-BD, FX3G-485-BD-RJ, FX3U-485-BD, FX2NC-CNV-IF, FX3G-EEPROM-32L, FX3U-1PSU-5V, FX3UC-1PS-5V, FX2NC-32BL, FX3U-32BL, FX3S-5DM, FX3G-5DM, FX-USB-AW, FX3U-7DM, FX3U-7DM-HLD, FX3U-CF-ADP