

I/O systems

SIMATIC ET 200 systems for the control cabinet
SIMATIC ET 200SP

I/O modules > Communication > CM 4x IO-Link

Ordering data	Article No.		Article No.
CM 4x IO-Link master V1.1 Standard communication module Serial communication module for connecting up to 4 IO-Link devices, time-based IO, BU type A0, color code CC04	6ES7137-6BD00-0BA0	Labeling strips 500 labeling strips on roll, light gray, for inscription with thermal transfer roll printer 500 labeling strips on roll, yellow, for inscription with thermal transfer roll printer 1000 labeling strips DIN A4, light gray, card, perforated, for inscription with laser printer 1000 labeling strips DIN A4, yellow, card, perforated, for inscription with laser printer	6ES7193-6LR10-0AA0 6ES7193-6LR10-0AG0 6ES7193-6LA10-0AA0 6ES7193-6LA10-0AG0
Accessories			
Usable type A0 BaseUnits			
BU15-P16+A10+2D BU type A0; BaseUnit (light) with 16 process terminals (1...16) to the module and an additional 10 internally jumpered AUX terminals (1 A to 10 A); for starting a new load group (max. 10 A) • 1 unit • 10 units	6ES7193-6BP20-0DA0 6ES7193-6BP20-2DA0		
BU15-P16+A0+2D BU type A0; BaseUnit (light) with 16 process terminals to the module; for starting a new load group (max. 10 A) • 1 unit • 10 units	6ES7193-6BP00-0DA0 6ES7193-6BP00-2DA0		6ES7193-6CP04-2MA0 6ES7193-6CP71-2AA0 6ES7193-6CP72-2AA0 6ES7193-6CP73-2AA0
BU15-P16+A10+2B BU type A0; BaseUnit (dark) with 16 process terminals (1...16) to the module and an additional 10 internally jumpered AUX terminals (1 A to 10 A); for continuing the load group • 1 unit • 10 units	6ES7193-6BP20-0BA0 6ES7193-6BP20-2BA0		
BU15-P16+A0+2B BU type A0; BaseUnit (dark) with 16 process terminals to the module; for continuing the load group • 1 unit • 10 units	6ES7193-6BP00-0BA0 6ES7193-6BP00-2BA0		
Equipment labeling plate 10 sheets of 16 labels, for printing with thermal transfer card printer or plotter	6ES7193-6LF30-0AW0	Spare parts Electronic coding element type H Pack of 5 units; included in scope of supply of CM 4x IO-Link module	6ES7193-6EH00-1AA0

Overview (continued)Supported BaseUnits

With the combination of the CM AS-i Master ST and F-CM AS-i Safety ST modules, the CM module is plugged onto a light type C0 BaseUnit and, directly to the right of it, the F-CM module is plugged onto a dark type C1 BaseUnit. The AS-i cable is connected only on the light BaseUnit of the CM module.

Notes on safety

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens products and solutions only represent one component of such a concept.

For more information on the topic of Industrial Security, see <http://www.siemens.com/industrialsecurity>.

Configuration

The following software is required for configuration of the F-CM AS-i Safety ST module:

- STEP 7 (classic), V5.5 SP3 HF4 or higher with HSP 2093¹⁾ and Distributed Safety V5.4 SP5 or F-Configuration Pack SP11

or

- STEP 7 (TIA Portal) V13 and higher with HSP 0070²⁾ and Safety Advanced V13.
For connection to S7-1500F you require STEP 7 V13 SP1. When configuring with STEP 7 V13 SP1, the latest version of HSP 0070 V2.0 (or higher) is an essential prerequisite. STEP 7 Safety V13 SP1 Update 4 and the new version of HSP 0070 V3.0 (or higher) is needed for configuration of the F-CM AS-i Safety ST module in an ET 200SP station with ET 200SP F-CPU 1510SP F/1512SP F (firmware V1.8 or higher) or 1515SP PC F.

Configuration and programming are done entirely in the STEP 7 user interface. No additional configuration software is needed for commissioning.

Data management – together with all other configuration data of the SIMATIC – is realized completely in the S7 project.

The input and output channels are assigned to the process image automatically and manual linking via configuration function blocks is not necessary.

If the F-CM AS-i Safety ST module is replaced, all necessary settings are automatically imported into the new module.

The F-CM AS-i Safety ST module occupies 16 input bytes and 8 output bytes in the I/O data of the ET 200SP station.

For diagnostics during ongoing operation, diagnostics blocks with clearly arranged visualization on the SIMATIC HMI panel are available or can be downloaded free of charge via a web browser, see <https://support.industry.siemens.com/cs/ww/en/view/109479103>.

¹⁾ HSP 2093; see <https://support.industry.siemens.com/cs/ww/en/view/23183356>.

²⁾ HSP 0070; see <https://support.industry.siemens.com/cs/ww/en/view/72341852>.

Ordering data**Article No.****F-CM AS-i Safety ST communication module****3RK7136-6SC00-0BC1**

- Fail-safe module for SIMATIC ET 200SP, can be plugged onto BaseUnit type C1 (alternatively type C0)
- Operation requires an AS-i master, e.g. CM AS-i Master ST
- Can be used up to SIL 3 (IEC 62061/IEC 61508), PL e (EN ISO 13849-1)
- Coding element type H (included in scope of supply)
- Dimensions (W x H x D / mm): 20 x 73 x 58

Accessories**BaseUnit BU20-P6+A2+4B****6ES7193-6BP20-0BC1**

- BaseUnit (dark), BU type C1
- Suitable for the F-CM AS-i Safety ST fail-safe module
- Continuation of an AS-i network, connection with the AS-i voltage of the left-hand module

Coding element type H (spare part)**6ES7193-6EH00-1AA0**

- For the ET 200SP modules F-CM AS-i Safety ST, CM 4xIO-Link
- Packing unit 5 items

More accessories

See CM AS-i Master ST communication modules

More information

For the Manual "F-CM AS-i Safety ST for SIMATIC ET 200SP", see <https://support.industry.siemens.com/cs/ww/en/view/90265988>.

Released combinations of the AS-i modules for ET 200SP, see <https://support.industry.siemens.com/cs/ww/en/view/103624653>.

Ordering data	Article No.		Article No.
Labeling strips			
500 labeling strips on roll, light gray, for inscription with thermal transfer roll printer	6ES7193-6LR10-0AA0	Color code CC42, for 12 process terminals, BU type F0, gray (terminals 1 to 8), red (terminals 9 to 10), blue (terminals 11 to 12)	6ES7193-6CP42-2MB0
500 labeling strips on roll, yellow, for inscription with thermal transfer roll printer	6ES7193-6LR10-0AG0	Color code CC51, for 6 process terminals, for BU type C0, C1, gray (terminals 1 to 4), red (terminal 5), blue (terminal 6)	6ES7193-6CP51-2MC0
1000 labeling strips DIN A4, light gray, card, for inscription with laser printer	6ES7193-6LA10-0AA0	Color code CC51, for 6 process terminals, for BU type C0, gray (terminals 1, 2 and 5), red (terminals 3 and 4), blue (terminal 6)	6ES7193-6CP52-2MC0
1000 labeling strips DIN A4, yellow, card, for inscription with laser printer	6ES7193-6LA10-0AG0		
Equipment labeling plate	6ES7193-6LF30-0AW0		
10 sheets of 16 labels			
BU cover		Color-coded labels for additional terminals	
For covering empty slots (gaps); 5 units		(pack containing 10 labels)	
• 15 mm wide	6ES7133-6CV15-1AM0	Color code CC71, for 10 AUX terminals, BU type A0, yellow/green (terminals 1 A to 10 A)	6ES7193-6CP71-2AA0
• 20 mm wide	6ES7133-6CV20-1AM0	Color code CC72, for 10 AUX terminals, BU type A0, red (terminals 1 A to 10 A)	6ES7193-6CP72-2AA0
Shield connection	6ES7193-6SC00-1AM0	Color code CC73, for 10 AUX terminals, BU type A0, blue (terminals 1 A to 10 A)	6ES7193-6CP73-2AA0
5 shield supports and 5 shield terminals each for plugging onto BaseUnits with automatic low-impedance connection to functional ground		Color code CC74, for 2x5 additional terminals, BU type A1, red (terminals 1B to 5B), blue (terminals 1C to 5C)	6ES7193-6CP74-2AA0
Module-specific color-coded labels		Color code CC81, for 4 AUX terminals, BU type B0, yellow/green (terminals 1 A to 4 A)	6ES7193-6CP81-2AB0
(pack containing 10 labels)		Color code CC82, for 4 AUX terminals, BU type B0, red (terminals 1 A to 4 A)	6ES7193-6CP82-2AB0
Color code CC00, for 16 process terminals, for BU type A0, A1, gray (terminals 1 to 8), red (terminals 9 to 16)	6ES7193-6CP00-2MA0	Color code CC83, for 4 AUX terminals, BU type B0, blue (terminals 1 A to 4 A)	6ES7193-6CP83-2AB0
Color code CC01, for 16 process terminals, for BU type A0, A1, gray (terminals 1 to 8), red (terminals 9 to 16)	6ES7193-6CP01-2MA0	Color code CC84, for 2 AUX terminals, BU type C0, C1, yellow/green (1 A to 2 A)	6ES7193-6CP84-2AC0
Color code CC02, for 16 process terminals, for BU type A0, A1, gray (terminals 1 to 8), blue (terminals 9 to 16)	6ES7193-6CP02-2MA0	Color code CC85, for 2 AUX terminals, BU type C0, C1, red (1 A to 2 A)	6ES7193-6CP85-2AC0
Color code CC03, for 16 process terminals, for BU type A0, A1, gray (terminals 1 to 8), red (terminals 9 to 12), gray (terminals 13 to 16)	6ES7193-6CP03-2MA0	Color code CC86, for 2 AUX terminals, BU type C0, C1, blue (1 A to 2 A)	6ES7193-6CP86-2AC0
Color code CC04, for 16 process terminals, BU type A0, A1, gray (terminals 1 to 8), red (terminals 9 to 12), blue (terminals 13 to 16)	6ES7193-6CP04-2MA0	Server module	6ES7193-6PA00-0AA0
Color code CC05, for 16 process terminals, for BU type A0, A1, gray (terminals 1 to 12), red (terminals 13 to 14), blue (terminals 15 to 16)	6ES7193-6CP05-2MA0	Spare parts	
Color code CC41, for 16 process terminals; for BU type B1, gray (terminals 1 to 4), red (terminals 5 to 8), blue (terminals 9 to 12)	6ES7193-6CP41-2MB0	e-coding element	
		Type H; pack containing 5 e-coding elements	6ES7193-6EH00-1AA0
		Type F; pack containing 5 e-coding elements	6ES7193-6EF00-1AA0