

Distributed Controllers

based on ET 200Pro

Standard CPUs

IM 154-8 PN/DP CPU

Ordering data

Article No.

Article No.

IE connecting cable M12-180/M12-180

- Preassembled IE FC TP Trailing Cable GP 2 x 2 (PROFINET Type C) with two 4-pin M12 plugs (4-pin, D-coded), degree of protection IP65/IP67, in various lengths:
 - 0.3 m
 - 0.5 m
 - 1.0 m
 - 1.5 m
 - 2.0 m
 - 3.0 m
 - 5.0 m
 - 10 m
 - 15 m
- PROFINET M12 connecting cable, trailing cable preassembled at both ends with angled M12 connectors (male insert), in various lengths:
 - 3.0 m
 - 5.0 m
 - 10 m
- PROFINET M12 connecting cable, trailing cable preassembled at one end with angled M12 connector (male insert at one end, other end open), in various lengths:
 - 3.0 m
 - 5.0 m
 - 10 m

6XV1870-8AE30
6XV1870-8AE50
6XV1870-8AH10
6XV1870-8AH15
6XV1870-8AH20
6XV1870-8AH30
6XV1870-8AH50
6XV1870-8AN10
6XV1870-8AN15

3RK1902-2NB30
3RK1902-2NB50
3RK1902-2NC10

3RK1902-2HB30
3RK1902-2HB50
3RK1902-2HC10

IE FC M12 Plug PRO

PROFINET M12 plug connector, D-coded with fast connection system, axial cable outlet.

- 1 unit
- 8 units
- PROFINET M12 plug connector, D-coded, angled.

6GK1901-0DB20-6AA0
6GK1901-0DB20-6AA8
3RK1902-2DA00

IE panel feed-through

Cabinet feedthrough for converting from the M12 connection system (D-coded, IP65/IP67) to the RJ45 connection system (IP20), 1 pack = 5 units.

6GK1901-0DM20-2AA5

7/8" connecting cable to power supply

5-wire, 5 x 1.5 mm², trailing type, preassembled with two 7/8" connectors (axial cable outlet), 5-pin, up to 50 m, in various lengths:

- 1.5 m
- 2.0 m
- 3.0 m
- 5.0 m
- 10 m
- 15 m
- Other special lengths with 90° or 180° cable outlet.

6XV1822-5BH15
6XV1822-5BH20
6XV1822-5BH30
6XV1822-5BH50
6XV1822-5BN10
6XV1822-5BN15

See
<http://support.automation.siemens.com/WW/view/en/26999294>

- Power cable, can be trailed, 5 x 1.5 mm², preassembled at both ends with 7/8" angled connectors (female insert at one end, male insert at the other end), in various lengths:
 - 3.0 m
 - 5.0 m
 - 10 m

3RK1902-3NB30
3RK1902-3NB50
3RK1902-3NC10

- Power cable, can be trailed, 5 x 1.5 mm², preassembled at one end with 7/8" angled connector with female insert (female insert at one end, other end open), in various lengths:
 - 3.0 m
 - 5.0 m
 - 10 m

3RK1902-3GB30
3RK1902-3GB50
3RK1902-3GC10

Power line

5-wire, 5 x 1.5 mm², trailing type, sold by the meter, minimum order quantity 20 m, maximum order quantity 1 000 m.

6XV1830-8AH10

7/8" cable connector

For ET 200eco, with axial cable outlet

- with male insert, 5-pack
- with female insert, 5-pack
- angled, with female insert, 1 unit
- angled, with male insert, 1 unit

6GK1905-0FA00
6GK1905-0FB00
3RK1902-3DA00
3RK1902-3BA00

7/8" cover cap, 10 per pack

6ES7194-3JA00-0AA0

Ordering data	Article No.	Article No.
CPU 1516pro-2 PN Work memory 1 MB for program, 5 MB for data, PROFINET IO IRT interface, PROFINET/PROFIBUS interface; SIMATIC Memory Card required	6ES7516-2PN00-0AB0	IE Connecting Cable M12-180/M12-180 • Preassembled IE FC TP Trailing Cable GP 2 x 2 (PROFINET Type C) with two 4-pin M12 plugs (4-pin, D-coded), degree of protection IP65/IP67, in various lengths: • 0.3 m • 0.5 m • 1.0 m • 1.5 m • 2.0 m • 3.0 m • 5.0 m • 10 m • 15 m • PROFINET M12 connecting cable, trailing cable preassembled at both ends with angled M12 connectors (male insert), in various lengths: • 3.0 m • 5.0 m • 10 m • PROFINET M12 connecting cable, trailing cable preassembled at one end with angled M12 connector (male insert at one end, other end open), in various lengths: • 3.0 m • 5.0 m • 10 m
Accessories SIMATIC Memory Card 4 MB ¹⁾ 12 MB ¹⁾ 24 MB ¹⁾ 256 MB ¹⁾ 2 GB ¹⁾ 32 GB ¹⁾	6ES7954-8LC02-0AA0 6ES7954-8LE02-0AA0 6ES7954-8LF02-0AA0 6ES7954-8LL02-0AA0 6ES7954-8LP02-0AA0 6ES7954-8LT03-0AA0	6XV1870-8AE30 6XV1870-8AE50 6XV1870-8AH10 6XV1870-8AH15 6XV1870-8AH20 6XV1870-8AH30 6XV1870-8AH50 6XV1870-8AN10 6XV1870-8AN15
Connection module CM CPU 2PN M12 / 7/8"; with 3 x M12 and 2 x 7/8", for connecting 2 x PROFINET	6ES7194-4AP00-0AA0	
Industrial Ethernet FC RJ45 Plug 180 RJ45 plug connector for Industrial Ethernet with a rugged metal enclosure and integrated insulation displacement contacts for connecting Industrial Ethernet FC installation cables; with 180° cable outlet • 1 unit • 10 units • 50 units	6GK1901-1BB10-2AA0 6GK1901-1BB10-2AB0 6GK1901-1BB10-2AE0	3RK1902-2NB30 3RK1902-2NB50 3RK1902-2NC10
Industrial Ethernet Fast Connect installation cables • FastConnect Standard Cable • FastConnect Trailing Cable • FastConnect Marine Cable	6XV1840-2AH10 6XV1840-3AH10 6XV1840-4AH10	
Industrial Ethernet FastConnect installation cables • IE FC TP Trailing Cable GP 2 x 2 ; sold by the meter, max. delivery unit 1 000 m; minimum order quantity 20 m. • IE TP Torsion Cable GP 2 x 2 ; sold by the meter, max. delivery unit 1 000 m; minimum order quantity 20 m.	6XV1870-2D 6XV1870-2F	6GK1901-0DB20-6AA0 6GK1901-0DB20-6AA8 3RK1902-2DA00
Industrial Ethernet FastConnect Stripping Tool	6GK1901-1GA00	IE panel feedthrough Cabinet feedthrough for converting from the M12 connection system (D-coded, IP65/IP67) to the RJ45 connection system (IP20), 1 pack = 5 units.

¹⁾ An MMC is essential for operating the CPU

Distributed Controllers

based on ET 200Pro

Fail-safe CPUs

IM 154-8 F PN/DP CPU

Ordering data	Article No.		Article No.
Accessories		Industrial Ethernet FastConnect installation cables	
SIMATIC Micro Memory Cards		• IE FC TP Trailing Cable GP 2 x 2; sold by the meter, max. delivery unit 1 000 m; minimum order quantity 20 m.	6XV1870-2D
MMC 64 KB ²⁾	6ES7953-8LF31-0AA0	• IE TP Torsion Cable GP 2 x 2; sold by the meter, max. delivery unit 1 000 m; minimum order quantity 20 m.	6XV1870-2F
For program backup.			
MMC 128 KB ²⁾	6ES7953-8LG31-0AA0		
For program backup.			
MMC 512 KB ²⁾	6ES7953-8LJ31-0AA0		
For program backup.			
MMC 2 MB ²⁾	6ES7953-8LL31-0AA0		
For program backup and/or firmware updates.			
MMC 4 MB ²⁾	6ES7953-8LM31-0AA0		
For program backup.			
MMC 8 MB ²⁾	6ES7953-8LP31-0AA0		
For program backup.			
Connection module	6ES7194-4AN00-0AA0	Industrial Ethernet FastConnect	
For CPU IM154-8 PN/DP, with 4 x M12 and 2 x 7/8", for connecting PROFINET and PROFIBUS DP.		Stripping Tool	6GK1901-1GA00
SCALANCE X-200 Industrial Ethernet switches	6GK5208-0HA10-2AA6	IE Connecting Cable M12-180/M12-180	
With integral SNMP access, web diagnostics, copper cable diagnostics and PROFINET diagnostics, for setting up linear, star and ring structures SCALANCE X208PRO, in degree of protection IP65, with eight 10/100 Mbit/s M12 ports, incl. eleven M12 dust caps.		• Preassembled IE FC TP Trailing Cable GP 2 x 2 (PROFINET Type C) with two 4-pin M12 plugs (4-pin, D-coded), degree of protection IP65/IP67, in various lengths: - 0.3 m - 0.5 m - 1.0 m - 1.5 m - 2.0 m - 3.0 m - 5.0 m - 10 m - 15 m • PROFINET M12 connecting cable, trailing cable preassembled at both ends with angled M12 connectors (male contact insert), in various lengths: - 3.0 m - 5.0 m - 10 m • PROFINET M12 connecting cable, trailing cable preassembled at one end with angled M12 connector (male contact insert at one end, other end open), in various lengths: - 3.0 m - 5.0 m - 10 m	6XV1870-8AE30 6XV1870-8AE50 6XV1870-8AH10 6XV1870-8AH15 6XV1870-8AH20 6XV1870-8AH30 6XV1870-8AH50 6XV1870-8AN10 6XV1870-8AN15
Industrial Ethernet FC RJ45 Plug 90			
RJ45 plug connector for Industrial Ethernet with a rugged metal housing and integrated insulation displacement contacts for connecting Industrial Ethernet FC installation cables; with 90° cable outlet.			
• 1 unit • 10 units	6GK1901-1BB20-2AA0 6GK1901-1BB20-2AB0		3RK1902-2NB30 3RK1902-2NB50 3RK1902-2NC10
Industrial Ethernet FC RJ45 Plug 180			
RJ45 plug connector for Industrial Ethernet with a rugged metal enclosure and integrated insulation displacement contacts for connecting Industrial Ethernet FC installation cables; with 180° cable outlet			
• 1 unit • 10 units • 50 units	6GK1901-1BB10-2AA0 6GK1901-1BB10-2AB0 6GK1901-1BB10-2AE0	IE FC M12 Plug PRO	
Industrial Ethernet FastConnect installation cables		PROFINET M12 plug connector, D-coded with fast connection system, axial cable outlet.	
• FastConnect Standard Cable • FastConnect Trailing Cable • FastConnect Marine Cable	6XV1840-2AH10 6XV1840-3AH10 6XV1840-4AH10	• 1 unit • 8 units • PROFINET M12 plug connector, D-coded, angled	6GK1901-0DB20-6AA0 6GK1901-0DB20-6AA8 3RK1902-2DA00
		IE panel feedthrough	
		Cabinet feedthrough for converting from the M12 connection system (D-coded, IP65/IP67) to the RJ45 connection system (IP20), 1 pack = 5 units	6GK1901-0DM20-2AA5

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Ordering data	Article No.	Article No.
CPU 1516pro F-2 PN Work memory 1.5 MB for program, 5 MB for data, PROFINET IO IRT interface, PROFINET/PROFIBUS interface; SIMATIC Memory Card required	6ES7516-2GN00-0AB0	
Accessories		
SIMATIC Memory Card 4 MB ¹⁾ 12 MB ¹⁾ 24 MB ¹⁾ 256 MB ¹⁾ 2 GB ¹⁾ 32 GB ¹⁾	6ES7954-8LC02-0AA0 6ES7954-8LE02-0AA0 6ES7954-8LF02-0AA0 6ES7954-8LL02-0AA0 6ES7954-8LP02-0AA0 6ES7954-8LT03-0AA0	
Connection module CM CPU 2PN M12 / 7/8"; with 3 x M12 and 2 x 7/8", for connecting 2 x PROFINET	6ES7194-4AP00-0AA0	
Industrial Ethernet FC RJ45 Plug 180 RJ45 plug connector for Industrial Ethernet with a rugged metal enclosure and integrated insulation displacement contacts for connecting Industrial Ethernet FC installation cables; with 180° cable outlet • 1 unit • 10 units • 50 units	6GK1901-1BB10-2AA0 6GK1901-1BB10-2AB0 6GK1901-1BB10-2AE0	
Industrial Ethernet Fast Connect installation cables • FastConnect Standard Cable • FastConnect Trailing Cable • FastConnect Marine Cable	6XV1840-2AH10 6XV1840-3AH10 6XV1840-4AH10	
Industrial Ethernet FastConnect installation cables • IE FC TP Trailing Cable GP 2 x 2; sold by the meter, max. delivery unit 1 000 m; minimum order quantity 20 m. • IE TP Torsion Cable GP 2 x 2; sold by the meter, max. delivery unit 1 000 m; minimum order quantity 20 m.	6XV1870-2D 6XV1870-2F	
Industrial Ethernet Fast Connect Stripping Tool	6GK1901-1GA00	
		IE Connecting Cable M12-180/M12-180 Preassembled IE FC TP Trailing Cable GP 2 x 2 (PROFINET Type C) with two 4-pin M12 plugs (4-pin, D-coded), degree of protection IP65/IP67, in various lengths: • 0.3 m • 0.5 m • 1.0 m • 1.5 m • 2.0 m • 3.0 m • 5.0 m • 10 m • 15 m PROFINET M12 connecting cable, trailing cable preassembled at both ends with angled M12 connectors (male insert), in various lengths: • 3.0 m • 5.0 m • 10 m PROFINET M12 connecting cable, trailing cable preassembled at one end with angled M12 connector (male insert at one end, other end open), in various lengths: • 3.0 m • 5.0 m • 10 m
		6XV1870-8AE30 6XV1870-8AE50 6XV1870-8AH10 6XV1870-8AH15 6XV1870-8AH20 6XV1870-8AH30 6XV1870-8AH50 6XV1870-8AN10 6XV1870-8AN15
		3RK1902-2NB30 3RK1902-2NB50 3RK1902-2NC10
		3RK1902-2HB30 3RK1902-2HB50 3RK1902-2HC10
		IE FC M12 Plug PRO PROFINET M12 plug connector, D-coded with fast connection system, axial cable outlet. • 1 unit • 8 units • PROFINET M12 plug connector, D-coded, angled.
		6GK1901-0DB20-6AA0 6GK1901-0DB20-6AA8 3RK1902-2DA00
		IE panel feedthrough Cabinet feedthrough for converting from the M12 connection system (D-coded, IP65/IP67) to the RJ45 connection system (IP20), 1 pack = 5 units.
		6GK1901-0DM20-2AA5

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Ordering data	Article No.		Article No.
ET 200eco PN digital input modules 8 DI 24 V DC; 4 x M12, dual assignment, IP67 degree of protection 8 DI 24 V DC; 8 x M12, IP67 degree of protection 16 DI 24 V DC; 8 x M12, dual assignment, IP67 degree of protection	6ES7141-6BF00-0AB0 6ES7141-6BG00-0AB0 6ES7141-6BH00-0AB0		
ET 200eco PN digital output modules 8 DO 24 V DC/0.5 A; 4 x M12, dual assignment, 1 load voltage supply DO; IP67 degree of protection 8 DO 24 V DC/1.3 A; 4 x M12, dual assignment, IP67 degree of protection 8 DO 24 V DC/1.3 A; 8 x M12, IP67 degree of protection 8 DO 24 V DC/2 A; 8 x M12, IP67 degree of protection 16 DO 24 V DC/1.3 A; 8 x M12, dual assignment, IP67 degree of protection	6ES7142-6BF50-0AB0 6ES7142-6BF00-0AB0 6ES7142-6BG00-0AB0 6ES7142-6BR00-0AB0 6ES7142-6BH00-0AB0		
ET 200eco PN digital input/output modules 8 DI/DO 24 V DC/1.3 A; 8 x M12, IP67 degree of protection	6ES7147-6BG00-0AB0		
ET 200eco PN analog input modules 8 AI 4 U/I + 4 RTD/TC; 8 x M12, IP67 degree of protection 8 AI RTD/TC; 8 x M12, IP67 degree of protection	6ES7144-6KD00-0AB0 6ES7144-6KD50-0AB0		
ET 200eco PN analog output modules 4 AO U/I; 4 x M12, IP67 degree of protection	6ES7145-6HD00-0AB0		
ET 200eco PN IO-Link master modules 4 IO-L + 8 DI + 4 DO, 24 V DC/1.3 A; 8 x M12, IP67 degree of protection, enclosure width 60 mm; for connecting up to 4 IO-Link devices according to IO-Link Specification V1.0 and port Class A as well as 8 digital inputs and 4 digital outputs 4 IO-L; 4 x M12, IP67 degree of protection, enclosure width 30 mm; for con- necting up to 4 IO-Link devices according to IO-Link Specification V1.0 and V1.1 and port Class B	6ES7148-6JA00-0AB0 6ES7148-6JD00-0AB0		
Accessories - PD voltage distributor, 24 V DC; 1 X 7/8", 4 X M12 - Terminal block for ET 200eco PN, 10 A insulation displacement terminals - Spare fuses for terminal block, 10 units - DIN rail 0.5 m - Profile screw for DIN rail, 50 units - M12 sealing cap for IP67 modules, 10 units - Labels 10 x 7 mm, pastel turquoise, 816 units	6ES7148-6CB00-0AA0 6ES7194-6CA00-0AA0 6ES7194-6HB00-0AA0 6ES7194-6GA00-0AA0 6ES7194-6MA00-0AA0 3RX9802-0AA00 3RT1900-1SB10		
		PROFINET M12 connector, for user assembly IE FC M12 PRO connector, for user assembly 1 unit 8 units	6GK1901-0DB20-6AA0 6GK1901-0DB20-6AA8
		PROFINET M12 connecting cables Pre-assembled connecting cables with 2 M12 connectors (D-coded) in various lengths: 0.3 m 0.5 m 1.0 m 1.5 m 2.0 m 3.0 m 5.0 m 10.0 m 15.0 m	6XV1870-8AE30 6XV1870-8AE50 6XV1870-8AH10 6XV1870-8AH15 6XV1870-8AH20 6XV1870-8AH30 6XV1870-8AH50 6XV1870-8AN10 6XV1870-8AN15
		M12 connector for 24 V DC load power supply Connection socket for 24 V DC incoming supply; 4-pin, A-coded, 3 units Connector for loop-through of 24 V DC; 4-pin, A-coded, 3 units	6GK1907-0DC10-6AA3 6GK1907-0DB10-6AA3
		M12 plug-in power cables Pre-assembled plug-in power cables, fitted at each end with M12 socket and plug 4 x 0.75 mm ² , in various lengths: 0.3 m 0.5 m 1.0 m 1.5 m 2.0 m 3.0 m 5.0 m 10.0 m 15.0 m	6XV1801-5DE30 6XV1801-5DE50 6XV1801-5DH10 6XV1801-5DH15 6XV1801-5DH20 6XV1801-5DH30 6XV1801-5DH50 6XV1801-5DN10 6XV1801-5DN15
		M12 coupler plug Can be assembled, for connecting actuators or sensors, 5-pin	3RK1902-4BA00-5AA0
		M12 Y cable For double connection of I/O by means of single cable to ET 200, 5-pin	6ES7194-6KA00-0XA0

Ordering data	Article No.		Article No.
ET 200eco PN IO-Link master 4 IO-L + 8 DI + 4 DO, 24 V DC/1.3 A; 8 x M12, IP67 degree of protection, enclosure width 60 mm; for connecting up to 4 IO-Link devices according to IO-Link Specification V1.0 and Port Class A as well as 8 digital inputs and 4 digital outputs 4 IO-L; 4 x M12, IP67 degree of protection, enclosure width 30 mm; for connecting up to 4 IO-Link devices according to IO-Link Specification V1.0 and V1.1 and port Class B	6ES7148-6JA00-0AB0 6ES7148-6JD00-0AB0	M12 connector for 24 V DC load power supply Connection socket for 24 V DC incoming supply; 4-pin, A-coded, 3 units Connector for loop-through of 24 V DC; 4-pin, A-coded, 3 units	6GK1907-0DC10-6AA3 6GK1907-0DB10-6AA3
Accessories - PD voltage distributor, 24 V DC; 1 X 7/8", 4 X M12 - Terminal block for ET 200eco PN, 10 A insulation displacement terminals - Spare fuses for terminal block, 10 units - DIN rail 0.5 m - Profile screw for DIN rail, 50 units - M12 sealing cap for IP67 modules, 10 units - Labels 10 x 7 mm, pastel turquoise, 816 units	6ES7148-6CB00-0AA0 6ES7194-6CA00-0AA0 6ES7194-6HB00-0AA0 6ES7194-6GA00-0AA0 6ES7194-6MA00-0AA0 3RK1901-1KA00 3RT1900-1SB10	M12 plug-in power cables Pre-assembled plug-in power cables, fitted at each end with M12 socket and plug 4 x 0.75 mm ² , in various lengths: 0.3 m 0.5 m 1.0 m 1.5 m 2.0 m 3.0 m 5.0 m 10.0 m 15.0 m	6XV1801-5DE30 6XV1801-5DE50 6XV1801-5DH10 6XV1801-5DH15 6XV1801-5DH20 6XV1801-5DH30 6XV1801-5DH50 6XV1801-5DN10 6XV1801-5DN15
PROFINET M12 connector, for user assembly IE FC M12 PRO connector, for user assembly 1 unit 8 units	6GK1901-0DB20-6AA0 6GK1901-0DB20-6AA8	M12 Y cable For double connection of I/O by means of single cable to ET 200, 5-pin	6ES7194-6KA00-0XA0
PROFINET M12 connecting cables Pre-assembled connecting cables with 2 M12 connectors (D-coded), in various lengths: 0.3 m 0.5 m 1.0 m 1.5 m 2.0 m 3.0 m 5.0 m 10.0 m 15.0 m	6XV1870-8AE30 6XV1870-8AE50 6XV1870-8AH10 6XV1870-8AH15 6XV1870-8AH20 6XV1870-8AH30 6XV1870-8AH50 6XV1870-8AN10 6XV1870-8AN15		