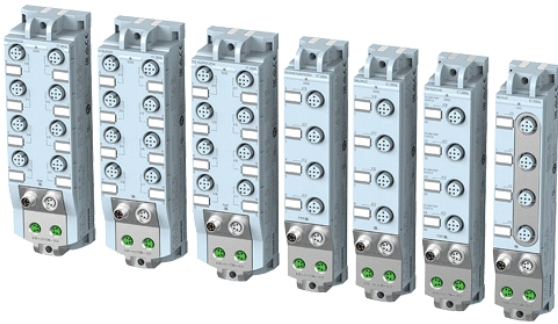


SIEMENS



# Product overview for SIMATIC ET 200AL

TIA Selection Tool Web



## SIMATIC ET 200AL

### Das robuste IO-System für die leichteste Montage überall

SIMATIC ET 200AL ist ein modulares, dezentrales Peripheriesystem mit kompakten Peripheriemodulen in IP65/67.

SIMATIC ET 200AL ist durch kompaktes Design, geringen Platzbedarf und Gewicht speziell für verteilte Steuerungselektronik auf engem Raum und bei Bewegung konzipiert.

<http://www.siemens.com/et200al>

## Highlights

### Flexible Montage reduziert den Installationsaufwand

- Ob vertikal oder horizontal installiert, ob frontal oder quer angeschraubt: in jeder Lage leicht zu installieren.
- Direkt an der Maschine oder Montagelinie montierbar.
- Geringer Platzbedarf durch 30 mm Modulbreite und sehr leichtem Modulgewicht von 145 g.
- Einbindung von Sensorik und Aktorik über M8- oder M12-Anschlusstechnik.

### Kennzeichnungssystem und Farbkodierung stellen eine einfache Verdrahtung sicher

- Farbige Zuordnung der Leitungen zu den Schnittstellen.
- Genaue Zuordnung IO-Buchse/LED/Beschriftungsclip.
- Clips für Kanal-, Steckplatz- und Modulkennzeichnung.
- Module können an PROFINET oder PROFIBUS angebunden werden.

### IO-Link Anbindung ermöglicht automatische Übertragung aktueller (Device- und Master-) Parameter auf das IO-Link Device bei einem Device-Wechsel

- IO-Link Master verfügt über einstellbare Parameter und Diagnosefunktionen und kann flexibel angepasst werden.

### Hohe Zuverlässigkeit durch Gehäusematerial aus Kunststoff

- Modul ist für bewegte Anwendungen mit dauerhaft 5 g und maximal 10 g ausgelegt.
- Module verfügen über elektronischen Kurzschlusschutz und laufen nach Netzunterbrechung oder Modultausch automatisch wieder an.
- Reduzierung der Verkabelung minimiert die Gefahr des Kabelbruchs.

### Hohe Robustheit entspricht der Schutzklasse IP65/67

- Module eignen sich für einen Einsatz von -25 bis +55 °C.
- Enclosure is splash-water protected, oil-proof and dust-proof.
- Kunststoffgehäuse ist robust und brennt nicht.

### Sichere Abschaltung von Aktoren über die Ausgänge

- Sicherheitsgerechte Abschaltung von Aktoren gemäß SIL2 / Performance Level d über Gruppenabschaltung der ET 200SP oder Safety Relais.
- Bestimmung bzw. Zuordnung des erforderlichen Performance Levels erfolgt im Rahmen der Risikobeurteilung nach EN ISO 13849-1.
- Einheitliches Anzeigekonzept.

### Durchgängigkeit in der Systemdiagnose durch einheitliches Engineering

- Kanalstatus-LEDs bei Analogbaugruppen.
- Genaue Zuordnung IO-Buchse / LED / Beschriftungsclip.

### Interface modules



	Article number
ET 200AL, IM 157-1 PN	6ES7157-1AB00-0AB0
ET 200AL, IM 157-1 DP	6ES7157-1AA00-0AB0

### Digital inputs



	Article number
ET 200AL, DI 8x24VDC, 4xM12	6ES7141-5AF00-0BA0
ET 200AL, DI 16x24VDC, 8xM12	6ES7141-5AH00-0BA0
ET 200AL, DI 8x24VDC, 8xM8	6ES7141-5BF00-0BA0

### Digital outputs



	Article number
ET 200AL, DQ 8x24VDC/2A, 8xM12	6ES7142-5AF00-0BA0

### Digital inputs/outputs




	Article number
ET 200AL, DIQ 4+DQ 4x24VDC/0,5A, 4xM12	6ES7143-5AF00-0BA0
ET 200AL, DIQ 4+DQ 4x24VDC/0,5A, 8xM8	6ES7143-5BF00-0BA0
ET 200AL, DIQ 16x24VDC/0,5A, 8xM12	6ES7143-5AH00-0BA0
<b>ET 200AL, F-DI 4+F-DQ 2x24VDC/2A, 4xM12</b>	6ES7146-5FF00-0BA0


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\* By clicking on the article number, you will be taken to the product in the TIA Selection Tool cloud.


### Analog inputs

	Article number
	ET 200AL, AI 4xU/I/RTD, 4xM12 6ES7144-5KD00-0BA0
	ET 200AL, AI 4xRTD/TC, 4xM12 6ES7144-5KD50-0BA0


### Analog outputs

	Article number
	ET 200AL, AQ 4xU/I, 4xM12 6ES7145-5ND00-0BA0

### Technology modules

	Article number
	<b>Counting</b> ET 200AL, DIQ 16x24VDC/0,5A, 8xM12 6ES7143-5AH00-0BA0

### Communication modules

	Article number
	ET 200AL, cm 4x IO-Link, 4xM12 6ES7147-5JD00-0BA0

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\* By clicking on the article number, you will be taken to the product in the TIA Selection Tool cloud.

Accessories

Article number

**Plugs and cables for M8 power supply**



Power Cable M8, 0,19m	6ES7194-2LH02-1AA0
Power Cable M8, 0,3m	6ES7194-2LH03-1AA0
Power Cable M8, 1,0M	6ES7194-2LH10-1AA0
Power Cable M8, 2,0M	6ES7194-2LH20-1AA0
Power Cable M8, 5,0M	6ES7194-2LH50-1AA0
Power Cable M8, 10m	6ES7194-2LN10-1AA0
Power Cable M8, 15m	6ES7194-2LN15-1AA0
Power Cable M8, angled, 0,3m	6ES7194-2LH03-1AB0
Power Cable M8, angled, 1,0M	6ES7194-2LH10-1AB0
Power Cable M8, angled, 2,0M	6ES7194-2LH20-1AB0
Power Cable M8, angled, 5,0M	6ES7194-2LH50-1AB0
Power Cable M8, angled, 10m	6ES7194-2LN10-1AB0
Power Cable M8, angled, 15m	6ES7194-2LN15-1AB0
Power Cable M8, 2,0M	6ES7194-2LH20-1AC0
Power Cable M8, 5,0M	6ES7194-2LH50-1AC0
Power Cable M8, 10m	6ES7194-2LN10-1AC0
Power Cable M8, 15m	6ES7194-2LN15-1AC0
Power Cable M8 0,19m	6ES7194-2MH02-1AA0
Power Cable M8, 0,3m	6ES7194-2MH03-1AA0
Power Cable M8, 1,0M	6ES7194-2MH10-1AA0
Power Cable M8, 2,0M	6ES7194-2MH20-1AA0
Power Cable M8, 5,0M	6ES7194-2MH50-1AA0
Power Cable M8, 10m	6ES7194-2MN10-1AA0
Power Cable M8, 15m	6ES7194-2MN15-1AA0
Power Cable M8, angled, 0,3m	6ES7194-2MH03-1AB0
Power Cable M8, angled, 1,0M	6ES7194-2MH10-1AB0
Power Cable M8, angled, 2,0M	6ES7194-2MH20-1AB0
Power Cable M8, angled, 5,0M	6ES7194-2MH50-1AB0
Power Cable M8, angled, 10m	6ES7194-2MN10-1AB0
Power Cable M8, angled, 15m	6ES7194-2MN15-1AB0
Power Cable M8, 2,0M	6ES7194-2MH20-1AC0
Power Cable M8, 5,0M	6ES7194-2MH50-1AC0
Power Cable M8, 10m	6ES7194-2MN10-1AC0
Power Cable M8, 15m	6ES7194-2MN15-1AC0
M8 Power Connector	6ES7194-2AA00-0AA0
M8 Power Connector, Socket	6ES7194-2AC00-0AA0
<b>PROFINET connectors and cables</b>	
IE M12 Plug PRO (1 piece)	6GK1901-0DB10-6AA0
IE M12 Plug PRO (8 piece)	6GK1901-0DB10-6AA8
IE FC M12 Plug PRO 2x2	6GK1901-0DB20-6AA0
IE FC M12 Plug PRO 2x2	6GK1901-0DB20-6AA8
M12 PROFINET PLUG ANGLED	3RK1902-2DA00
IE FC TP Standard Cable GP2x2 sold by m	6XV1840-2AH10
IE FC TP Trailing Cable 2x2 sold by m	6XV1840-3AH10
IE FC TP Trailing Cable 2x2 sold by m	6XV1870-2D
IE FC TP Marine Cable sold by the m	6XV1840-4AH10
IE TP Torsion Cable 2x2 sold by the m	6XV1870-2F
IE FC TP Flexible Cable GP 2x2 sold by m	6XV1870-2B
FC TP FRNC Cable GP, sold by the m	6XV1871-2F
IE FC TP Food Cable GP 2x2 sold by the m	6XV1871-2L
IE FC TP Festoon Cable 2x2 sold by the m	6XV1871-2S
IE Connecting Cable M12-180/M12-180 0,3m	6XV1870-8AE30
IE Connecting Cable M12-180/M12-180 0,5m	6XV1870-8AE50
IE Connecting Cable M12-180/M12-180 1 m	6XV1870-8AH10

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## Accessories

	Article number
IE Connecting Cable M12-180/M12-180 1,5m	6XV1870-8AH15
IE Connecting Cable M12-180/M12-180 2 m	6XV1870-8AH20
IE Connecting Cable M12-180/M12-180 3 m	6XV1870-8AH30
IE Connecting Cable M12-180/M12-180 5 m	6XV1870-8AH50
IE Connecting Cable M12-180/M12-180 10 m	6XV1870-8AN10
IE Connecting Cable M12-180/M12-180 15 m	6XV1870-8AN15
BUS CABLE PROFINET 3 M BOTH SIDES	3RK1902-2NB30
BUS CABLE PROFINET 5 M BOTH SIDES	3RK1902-2NB50
BUS CABLE PROFINET 10 M BOTH SIDES	3RK1902-2NC10
BUS CABLE PROFINET 3 M	3RK1902-2HB30
BUS CABLE PROFINET 5 M	3RK1902-2HB50
BUS CABLE PROFINET 10 M	3RK1902-2HC10
IE Connecting Cable M12-180/RJ45, 2 m	6XV1871-5TH20
IE Connecting Cable M12-180/RJ45, 3 m	6XV1871-5TH30
IE Connecting Cable M12-180/RJ45, 5 m	6XV1871-5TH50
IE Connecting Cable M12-180/RJ45, 10 m	6XV1871-5TN10
IE Connecting Cable M12-180/RJ45, 15 m	6XV1871-5TN15
IE Connecting Cable M12-90/M12-90, 0,3m	6XV1870-8GE30
IE Connecting Cable M12-90/M12-90, 0,5m	6XV1870-8GE50
IE Connecting Cable M12-90/M12-90, 1 m	6XV1870-8GH10
IE Connecting Cable M12-90/M12-90, 1,5m	6XV1870-8GH15
IE Connecting Cable M12-90/M12-90, 2 m	6XV1870-8GH20
IE Connecting Cable M12-90/M12-90, 3 m	6XV1870-8GH30
IE Connecting Cable M12-90/M12-90, 5 m	6XV1870-8GH50
IE Connecting Cable M12-90/M12-90, 10 m	6XV1870-8GN10
IE Connecting Cable M12-90/M12-90, 15 m	6XV1870-8GN15
<b>PROFIBUS DP connectors and cables</b>	
M12-Terminating connector	6GK1905-0EC00
M12-Connector	6GK1905-0EB00
M12 PROFIBUS SOCKET ANGLED	3RK1902-1DA00
M12-Connector	6GK1905-0EA00
PB FC M12 Plug PRO	6GK1905-0EA10
M12 PROFIBUS PLUG ANGLED	3RK1902-1BA00
M12-TERMINATING CONNECTOR	6GK1905-0ED00
PB FC Standard Cable GP sold by the m	6XV1830-0EH10
PB FC Trailing Cable sold by the m	6XV1830-3EH10
PB FC Food bus Cable sold by the m	6XV1830-0GH10
PB FC Robust bus Cable sold by the m	6XV1830-0JH10
PB FC FRNC Cable GP sold by the m	6XV1830-0LH10
PB FC Underground Cable sold by the m	6XV1830-3FH10
PB Festoon Cable GP sold by the m	6XV1830-3GH10
PB FC Flexible Cable GP sold by the m	6XV1831-2K
PROFIBUS M12 CONNECTING CABLE 0.3 M	6XV1830-3DE30
PROFIBUS M12 CONNECTING CABLE 0.5 M	6XV1830-3DE50
PROFIBUS M12 CONNECTING CABLE 1.0 M	6XV1830-3DH10
PROFIBUS M12 CONNECTING CABLE 1.5 M	6XV1830-3DH15
PROFIBUS M12 CONNECTING CABLE 2.0 M	6XV1830-3DH20
PROFIBUS M12 CONNECTING CABLE 3 M	6XV1830-3DH30
PROFIBUS M12 CONNECTING CABLE 5 M	6XV1830-3DH50
PROFIBUS M12 CONNECTING CABLE 10 M	6XV1830-3DN10
PROFIBUS M12 CONNECTING CABLE 15 M	6XV1830-3DN15
BUS CABLE PROFIBUS 3M BOTH SIDES	3RK1902-1NB30
BUS CABLE PROFIBUS 5M BOTH SIDES	3RK1902-1NB50
BUS CABLE PROFIBUS 10M BOTH SIDES	3RK1902-1NC10
BUS CABLE PROFIBUS 3 M ONESIDED	3RK1902-1GB30

 : Safety-related component

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## Accessories

	Article number
BUS CABLE PROFIBUS 5M ONE SIDED	3RK1902-1GB50
BUS CABLE PROFIBUS 10 M ONE SIDED	3RK1902-1GC10
<b>ET connection plugs and cables</b>	
Connecting Cable ET-Connection, 0,19m	6ES7194-2LH02-0AA0
Connecting Cable ET-Connection, 0,3m	6ES7194-2LH03-0AA0
Connecting Cable ET-Connection, 1,0M	6ES7194-2LH10-0AA0
Connecting Cable ET-Connection, 2,0M	6ES7194-2LH20-0AA0
Connecting Cable ET-Connection, 5,0M	6ES7194-2LH50-0AA0
Bus Cable ET-Connection, 10m	6ES7194-2LN10-0AA0
Bus Cable ET-Connection, 15m	6ES7194-2LN15-0AA0
Connecting Cable ET-Con., angled, 0,3m	6ES7194-2LH03-0AB0
Connecting Cable ET-Con., angled, 1,0M	6ES7194-2LH10-0AB0
Connecting Cable ET-Con., angled, 2,0M	6ES7194-2LH20-0AB0
Connecting Cable ET-Con., angled, 5,0M	6ES7194-2LH50-0AB0
Bus Cable ET-Connection, angled, 10m	6ES7194-2LN10-0AB0
Bus Cable ET-Connection, angled, 15m	6ES7194-2LN15-0AB0
Connecting Cable ET-Connection, 2,0M	6ES7194-2LH20-0AC0
Connecting Cable ET-Connection, 5,0M	6ES7194-2LH50-0AC0
Bus Cable ET-Connection, 10m	6ES7194-2LN10-0AC0
Bus Cable ET-Connection, 15m	6ES7194-2LN15-0AC0
Connecting Cable ET-Connection, 0,19m	6ES7194-2MH02-0AA0
Connecting Cable ET-Connection, 0,3m	6ES7194-2MH03-0AA0
Connecting Cable ET-Connection, 1,0M	6ES7194-2MH10-0AA0
Connecting Cable ET-Connection, 2,0M	6ES7194-2MH20-0AA0
Connecting Cable ET-Connection, 5,0M	6ES7194-2MH50-0AA0
Bus Cable ET-Connection, 10m	6ES7194-2MN10-0AA0
Bus Cable ET-Connection, 15m	6ES7194-2MN15-0AA0
Connecting Cable ET-Con., angled, 0,3m	6ES7194-2MH03-0AB0
Connecting Cable ET-Con., angled, 1,0M	6ES7194-2MH10-0AB0
Connecting Cable ET-Con., angled, 2,0M	6ES7194-2MH20-0AB0
Connecting Cable ET-Con., angled, 5,0M	6ES7194-2MH50-0AB0
Bus Cable ET-Connection, angled, 10m	6ES7194-2MN10-0AB0
Bus Cable ET-Connection, angled, 15m	6ES7194-2MN15-0AB0
Connecting Cable ET-Connection, 2,0M	6ES7194-2MH20-0AC0
Connecting Cable ET-Connection, 5,0M	6ES7194-2MH50-0AC0
Bus Cable ET-Connection, 10m	6ES7194-2MN10-0AC0
Bus Cable ET-Connection, 15m	6ES7194-2MN15-0AC0
M8 Connector ET-Connection	6ES7194-2AB00-0AA0
Connecting Cable ET-Connection, 0,2m	6ES7194-2LH02-0AD0
Connecting cable ET-Connection 0,2m	6ES7194-2MH02-0AD0
Stripping Tool ET-Connection	6ES7194-2KA00-0AA0
<b>Accessories M8, M12</b>	
AS-I CAP PLUGS	3RX9802-0AA00
AS-INTERFACE, BLANK PLUG	3RK1901-1KA00
AS-INTERFACE, BLANK PLUG	3RK1901-1PN00
M12 CONNECTOR STRAIGHT	3RK1902-4BA00-5AA0
M12 PROFIBUS SOCKET ANGLED	3RK1902-4DA00-5AA0
M12 PROFIBUS SOCKET ANGLED	3RK1902-4HB15-5AA0
M12 PROFIBUS SOCKET ANGLED	3RK1902-4HB50-5AA0
M12 PROFIBUS SOCKET ANGLED	3RK1902-4HC01-5AA0
M12 - M12 CABLE 1.5M 3 POLE	3RK1902-4PB15-3AA0
ET200, Y Cable	6ES7194-6KA00-0XA0
ET200, Y cable	6ES7194-6KB00-0XA0
E coding plug, IP 65/67	6ES7194-6KB01-0AA0
ET200, Y cable	6ES7194-6KC00-0XA0

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## Accessories

	Article number
Conn. Cable IO-Link, 2 X M12-4pin, 5m	6GT2891-4MH50
Conn. Cable IO-Link, 2 X M12-4pin, 10m	6GT2891-4MN10
Control Cable 5 core cable sold by meter	6XV1801-2C
Control Connecting Cable M12/M12, 0,5m	6XV1801-2CE50
Control Connecting Cable M12/M12, 1,0m	6XV1801-2CH10
Control Connecting Cable M12/M12, 1,0m	6XV1801-2CH15
Control Connecting Cable M12/M12, 2,0m	6XV1801-2CH20
Control Connecting Cable M12/M12, 3,0m	6XV1801-2CH30
Control Connecting Cable M12/M12, 5,0m	6XV1801-2CH50
Control Connecting Cable M12/M12, 10,0m	6XV1801-2CN10
Control Connecting Cable M12/M12, 15,0m	6XV1801-2CN15
<b>Identification labels</b>	
Identification Labels 10x5 mm, RAL9016	6ES7194-2BA00-0AA0

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