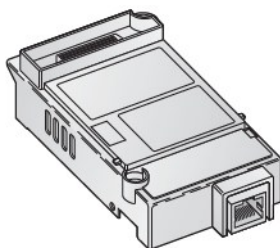


Special Interface Adapter and Cables for Operator Terminals GT15/GT16

The HMI communications and interface adapters support connection directly to a PLC or directly to a network.

All GT15 modules can be used for the new GT16 terminals, too, except the Ethernet module GT15-J71E71-100.

Further details on request.



Adapter type (use)	Interface name	Application	Order number
MELSEC A-Bus interface	GT15-75ABUSSL	GT15/GT16 (1 channel), slim model	166243
	GT15-ABUS	GT15/GT16 (1 channel), standard model	169467
	GT15-75ABUS2SL	GT15/GT16 (2 channels), slim model	166304
	GT15-ABUS2	GT15/GT16 (2 channels), standard model	169468
MELSEC Q-Bus interface	GT15-75QBUSSL	GT15/GT16 (1 channel), slim model	166305
	GT15-QBUS	GT15/GT16 (1 channel), standard model	169465
	GT15-75QBUS2SL	GT15/GT16 (2 channels), slim model	166306
	GT15-QBUS2	GT15/GT16 (2 channels), standard model	169466
Ethernet RJ45	GT15-J71E71-100	GT15	166309
Serial interface	GT15-RS2-9P	GT15/GT16 (serial interface RS232, 9-pin D-Sub)	169469
	GT15-RS2T4-9P	GT15/GT16 (converter RS232 -> RS422; 9-pin D-Sub)	166307
	GT15-RS4-9S	GT15/GT16 (serial interface RS422/485, 9-pin D-Sub)	169470
	GT15-RS4-TS	GT15/GT16 (serial interface RS422/485, screw terminals)	169471
	GT15-RS2T4-25P	GT15/GT16 (converter RS232 -> RS422; 25-pin D-Sub)	166308
	CC-Link interface	GT15-J61BT13	GT15/GT16
MELSECNET/10/H	GT15-J71BR13	GT15/GT16 (for coaxial connection)	229843
	GT15-J71LP23-25	GT15/GT16 (for optical SI cable)	229842
USB	GT15-PRN	GT15/GT16 (for USB connection to pictbridge compatible printers)	170169
MES option card (for direct database connection)	GT15-MESB48M	GT15 option card with 48 MB expansion memory and MES functionality	203473
	GT16M-MESB	GT16 option card with MES functionality	221369

Option Cards for GT15

The operator terminals of the GT15 series are able to use several special functions built into the terminal. To use multi-channel communication, document display, System Q ladder monitor and MES functionality an option board is required. They are fitted in the expansion slot on the rear side of the terminal and are recognized automatically by the GT15. Further details on request.

Option card	Application	Order number
GT15-FNB	Option card for the use of special functions (without System Q support)	166313
GT15-QFNB	Option card for the use of special functions (with System Q support)	166314
GT15-QFNB16M	Option card for the use of special functions (with System Q support and 16 MB expansion memory for project data)	166315
GT15-QFNB32M	Option card for the use of special functions (with System Q support and 32 MB expansion memory for project data)	166316
GT15-QFNB48M	Option card for the use of special functions (with System Q support and 48 MB expansion memory for project data)	166317
GT15-MESB48M	Option card for the use of additional MES functionality (with System Q support and 48 MB expansion memory for project data)	203473

Video Interfaces for GT15/GT16

Video interfaces can be used with the GT15/GT16 video panels to support video functions. With the help of these interfaces, images from PC's, cameras and vision sensors can be monitored on the GOT.

Further details on request.


















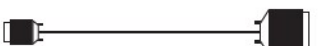




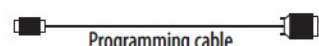
























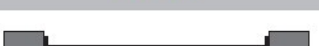

Video unit	Application	Order number
GT15V-75V4	Video input unit for GT15 video compatible models, 4 x NTSC/PAL inputs	203497
GT15V-75R1	Video input unit for GT15 video compatible models, 1 x RGB composite input	203498
GT15V-75V4R1	Video input unit for GT15 video compatible models, 4 x NTSC/PAL inputs, 1 x RGB composite input	203499
GT15V-75ROUT	Video input unit for GT15 video compatible models, 1 x RGB composite output	203500
GT16M-MMR	GOT multimedia option board for GT16 HMIs	221362
GT16M-V4	GOT Video Input Unit for GT16 HMIs, 4x NTSC/PAL inputs 75 Ohm	221363
GT16M-V4R1	GOT Video Input Unit for GT16, 4x NTSC/PAL inputs, 1x RGB composite input	221364
GT16M-R2	GOT Video Input Unit for GT16 HMIs, 2x RGB composite input	221365
GT16M-ROUT	GOT Video Output Unit for GT16, 1x RGB composite output	221366

Cables

For all GOT and E series operator terminals is a wide variety of different cables available.















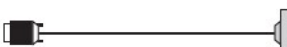



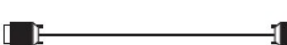
























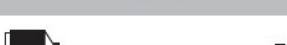


All cables have to be ordered separately due to the specific application.

The length for all cables is 3.0 m, if not differently indicated.

Operator terminal	Interface	Connector	Cable	Connector	Periphery	Order number
GT1000 series (except GT1020/GT1030)	Frontside USB	MINI-B USB	GT09-C20USB-5P	USB-A	Personal Computer	166373 (2 m length)
						
GT1000 series (except GT1020/GT1030)	integrated RS232	D-SUB male connector 9 pin	GT01-C30R2-6P	MINI-DIN male connector 6 pin	MELSEC System Q	163959
						
GT1000 series (except GT1020/GT1030)	integrated RS422 or GT15/GT16 adapter	D-SUB male connector 9 pin	GT01-C30R4-8P	MINI-DIN male connector 8 pin	MELSEC FX	163948 further lengths on request
						
GT1000 series (except GT1020/GT1030)	integrated RS422 or GT15/GT16 adapter	D-SUB male connector 9 pin	GT01-C30R4-25P	D-SUB male connector 25 pin	MELSEC AnS/QnAS and AnU/QnA	163953 further lengths on request
						
GT1020 / GT1030	RS232	Mini-DIN male connector 6-pin	GT01-C30R2-6P	D-SUB male connector 9 pin	PC	163959
			 Programming cable			
GT1020 / GT1030	RS422	open terminals	GT10-C30R4-8P	MINI-DIN male connector 8 pin	MELSEC FX	200494 further lengths on request
						
GT1020 / GT1030	RS232	open terminals	GT10-C30R2-6P	MINI-DIN male connector 6 pin	MELSEC System Q	200498
						
GT1020 / GT1030	RS232	Mini-DIN male connector 6-pin	GT10-RS2TUSB-5S	MINI-B USB	PC + GT09-C20USB-5P	200500 + 166373
			 Converter			
GT15 / GT16		A-BUS	GT15-A15C30B	A-BUS	MELSEC AnS/QnAS	166358 further lengths on request
						
GT15 / GT16		A-BUS	GT15-AC30B	A-BUS	MELSEC AnS/QnAS and AnU/QnA	166380 further lengths on request
						
GT15 / GT16		Q-BUS	GT15-QC30B	Q-BUS	MELSEC System Q	166348 further lengths on request
						

5 ACCESSORIES

Cables

Operator terminal	Interface	Connector	Cable	Connector	Periphery	Order number
GT16	RS422/RS485	female ribbon cable connector 14 pin	GT16-C20R4-95*	D-SUB male connector 9-pin		0.2 m: 221380
						
GT16	RS422/RS485	D-SUB male connector 9 pin	FA-LTBGTR4CBL05	Terminal block		0.5 m: 221381
						
GT16	RS422/RS485	D-SUB male connector 9 pin	FA-LTBGTR4CBL10	Terminal block		1.0 m: 221382
						
GT16	RS422/RS485	D-SUB male connector 9 pin	FA-LTBGTR4CBL20	Terminal block		2.0 m: 221383
						
E1000	RS232	D-SUB female connector 9 pin	CAB30	D-SUB female connector 9 pin	Personal Computer	163002
						
E1000	RS422	D-SUB male connector 25 pin	CAB19	MINI-DIN male connector 8 pin	MELSEC FX	146861
						
E1000	RS422	D-SUB male connector 25 pin	CAB18 (MAC40-CPU-CAB-R4)	D-SUB male connector 25 pin	MELSEC AnS/QnAS and AnU/QnA	146855 further lengths on request
						
E1000	RS422	D-SUB male connector 25 pin	CAB17	MINI-DIN male connector 6 pin	MELSEC System Q	140472
						
E1000	RS232	D-SUB male connector 9-pin	CAB34/3	MINI-DIN male connector 6 pin	MELSEC System Q	163006 further lengths on request
						
E1000	RS422	D-SUB male connector 25 pin	CAB36	D-SUB male connector 9 pin	Siemens S7/MPI direct	205178
						

* GOT RS422/RS485 cable adapter, 0.2 m. This adapter is to be used with a standard GOT1000 communication cable, e.g. GT01-C30R4-8P.

Cables for Third Party Manufacturers

These cables can only be used for the connection of an GOT1000 or E1000 operator terminal to a Third Party Manufacturer PLC. They all have the name CAB with a specific number.

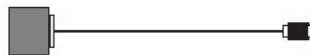
CAB30 is a connection cable for E1000 series terminals, it connects the Siemens HMI adapter for MPI with the RS232 port.

CAB8 is a communications adapter for RS485 networks by using the RS422 port.

CAB11 is an HMI adapter cable for the connection of a Siemens SIMATIC S7/MPI with CAB30 (for E1000 series).

CAB11 can also be used for GOT1000 series (with selfmade GT11+GT15 cable). Below an example is shown.

Operator terminal	Interface	Connector	Cable	Connector	Periphery	Order number
GOT1000 or E1000 series	RS232 / RS422	D-SUB male connector	CAB8 / CAB11 / CAB30	Depends on the PLC of the third party manufacturer	Third party PLC	Refer to the table below



Specifications	CAB30	CAB8	CAB11	CAB36
Application for	Siemens HMI adapter for MPI	RS485 networks	Siemens S7/MPI	Siemens S7/MPI
Interfaces	HMI RS232 (E1000)	RS422 (E series)	RS232 (all GOT1000 / E series)	RS422 (E1000)
	PLC RS232	RS485	RS232	MPI (9 pin D sub)
Length	m 3.0	—	3.0	3.0
Order information	Art. no. 163002	124268	132351	205178

Special Connection Cables for the Graphic Handy Operator Terminals

Connection of the Handy Operator Terminals to the PLC CPU

The cable is connected to the plug on the back side of the GT11 handy GOT, which provides a larger operating range than fixed mounted terminals. The cable is lead into the cabinet or panel and enables the mobile

connection of the Handy GOT using the interface in a cabinet or control panel. The GT11 handy terminals carry a bayonet-joint at the lower end of the unit.

From there it is easy to connect the line to the PLC.

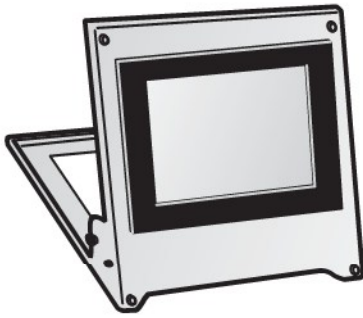
Operator terminal	Interface	Cable	Switch cabinet	Cable	Connector	Periphery
GT11 Handy	External cable	GT11H-C30-37P GT11H-C60-37P / GT11H-C100-37P		GT11H-C15R4-8P	MINI-DIN male connector 8 pin	MELSEC FX
GT11 Handy	External cable	GT11H-C30-37P GT11H-C60-37P / GT11H-C100-37P		GT11H-C15R4-25P	D-SUB male connector 25 pin	AnS/QnAS, AnU/QnA
GT11 Handy	External cable	GT11H-C30-37P GT11H-C60-37P / GT11H-C100-37P		GT11H-C15R2-6P	MINI-DIN male connector 6 pin	MELSEC System Q
GT11 Handy	External cable	GT11H-C30 / GT11H-C60 / GT11H-C100			open terminals	Computer-Link, Inverters, Servo amplifiers

① These cables with open terminals can be used for the connection to serial communication modules, Computer-Link, inverters, and servo amplifiers.

Specifications	GT11H-C30-37P / GT11H-C60-37P / GT11H-C100-37P	GT11H-C30 / GT11H-C60 / GT11H-C100	GT11H-C15R4-8P	GT11H-C15R4-25P	GT11H-C15R2-6P
Cable type	External cable for GT11 handy	External cable for GT11 handy	Relay cable	Relay cable	Relay cable
Connector 1	Round female connector 32 pin	Round female connector 32 pin	D-SUB female connector 37 pin	D-SUB female connector 37 pin	D-SUB female connector 37 pin
Connector 2	D-SUB male connector 37 pin	Open terminals	MINI-DIN male connector 8 pin	D-SUB male connector 25 pin	MINI-DIN male connector 6 pin
Further connections	—	—	For power supply and external signals	For power supply and external signals	For power supply and external signals
Applicable CPU type	—①	Factory automation periphery	MELSEC FX family	MELSEC AnS/QnAS and AnU/QnA	MELSEC System Q
Length	m 3.0 / 6.0 / 10.0	3.0 / 6.0 / 10.0	1.5	1.5	1.5
Order information	Art. no. 191013 / 191014 / 191015	191016 / 191017 / 191018	191019	191020	191021

① For the connection of the PLC CPU a further cable is required (GT11H-C15R4-8P for MELSEC FX CPU or GT11H-C15R4-25P for MELSEC AnS/QnAS CPU or GT11H-C15R2-6P for MELSEC System Q CPU)

General Accessories

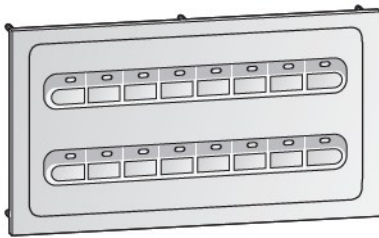


Screen surface protection

Protective film sheets protect the sensitive screen of the unit from scratches and reflections.

Stands

For the GT10/GT11 and GT15/GT16 terminals stands for table-top installation are available. The stands are useful for debugging the GOT screen data, as they can set the GOT at a proper angle on the table.



Keyboard extension X-Key-16

For all E1000 series graphical operator terminals the keyboard extension X-Key-16 is available.

Up to 4 keyboard extensions can be connected to one operator terminal.

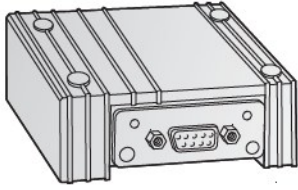
The keyboard extension provides 16 function keys and LEDs, which can be used and programmed as the standard integrated keyboard.

Specifications	GT10-20PSCB	GT10-30PSCB	GT11-50PSCB	GT11H-50PSC	GT15-50PSCB	GT15-60PSCB	GT15-70PSCB	GT15-80PSCB	GT15-90PSCB	GT16-60PSCB	GT16-70PSCB	GT16-80PSCB	GT16-90PSCB	
Type of accessory	Protective film sheets for the display surface													
Use for operator terminal	GT1020	GT1030	GT11	GT11H handy GOTs	GT155x with 5.7" display	GT15 with 8.4" display	GT15 with 10.4" display	GT15 with 12.1" display	GT15 with 15" display	GT16 with 8.4" display	GT16 with 10.4" display	GT16 with 12.1" display	GT16 with 15" display	
Set of	5	5	5	5	5	5	5	5	5	5	5	5	5	
Order information	Art. no.	200501	206973	163645	191023	203501	166329	166333	166337	169476	221959	221958	221958	221370

Specifications	E1032 Protection Sheet	E1041/43 Touch Protection Sheet	E1060 Protection Sheet	E1061/63 Touch Protection Sheet	E1070 Protection sheet	E1071 Touch Protection sheet	E1100 Protection sheet	E1101 Touch Protection sheet	E1151 Touch Protection sheet	
Type of accessory	Protective film sheets for the display surface									
Use for operator terminal	E1032	E1041/43	E1060	E1061/63	E1070	E1071	E1100	E1101	E1151	
Set of	1	1	1	1	1	1	1	1	1	
Order information	Art. no.	206836	206837	206838	206839	168155	168122	168156	168123	168154

Specifications	GT05-50STAND	GT15-70STAND	GT15-80STAND	GT15-90STAND	GT15-BAT	X-Key-16	
Type of accessory	Stand for table-top installation				Buffer battery for realtime clock and historical data backup	External keyboard extension for E1000 series	
Use for operator terminal	GOT1000 with 5.7" display	GOT1000 with 8.4" and 10.4" display	GOT1000 with 12.1" display	GOT1000 with 15" display	GT15/GT16	All E1000 series models	
Set of	1	1	1	1	1	1	
Details	—	—	—	—	Lithium battery	Connection via RS232C/RS422	
Order information	Art. no.	203502	166341	166342	218577	166345	217656

Communications Adapter



Profibus/DP Communications adapter

For the E1000 series a Profibus/DP Slave adapter **E1000-EM-Profibus/DP** is available. This is attached at the extension port at the rear side of the control terminal. The parametrization and setting of the network address are made in the software E-Designer.

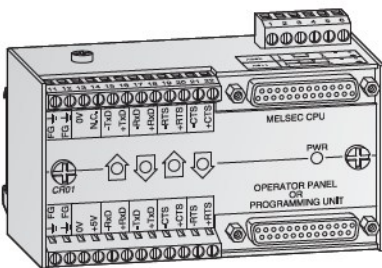
Specifications		E1000-EM-Profibus/DP
Use for operator terminal		E1000 series
Type		Adapter
Application		Profibus/DP Slave
Order information	Art. no.	169488

Interfaces and Adapters for GOT1000

Several adapters and interfaces for different GOT1000 models are available. Further details on request.

Optional unit	Application	Order number
GT15-DIO	Optional interface for digital I/Os, 16 (max. 128) inputs, 16 outputs	209827
GT15-DIOR	Digital I/O-card for GT15/GT16, 16 inputs, 16 outputs, negative common input	221953
GT01-RS4-M	RS-485 Multi-drop master unit, 16 GOTs to one FX/Q PLC	225497
GT10-9PT5S	GOT RS-485 adapter for GT10 QVGA and GT11 QVGA models, 9-pin DSUB	225498
GT10-50FMB	GOT data transfer memory board for GT105x	218493

Interface Converter CR01-R2/R4 SET and CR01-R4/R4



CR01-R2/R4 SET and CR01-R4/R4

These modules are signal repeater with electrical isolation for RS422 signals. The regular maximum distance between two CR01 modules is 1200 m.

If only one interface converter is in use, the maximum distance is 500 m. The modules include a DIN rail adapter and LEDs indicating the flow of data.

Specifications		CR01-R2/R4 SET	CR01-R4/R4
Conversion		RS232↔RS422	RS422↔RS422
RS422 interface		Terminal strip + 25 pin D-SUB male connector for both units	
RS232 interface		9 pin D-SUB male connector	—
Nominal voltage	V AC	115 / 230	115 / 230
Voltage range	V AC	90 – 130 / 150 – 255	90 – 130 / 150 – 255
Supply frequency range	Hz	48 – 62	48 – 62
Power consumption	VA	6	6
Protection rating		IP20	IP20
Weight	kg	0.55	0.55
Order information	Art. no.	56172	56173