

# Facts, facts, facts: The communication modules

Technical data		
Communication modules	EM 277 PROFIBUS DP slave module <sup>1</sup>	CP 243-2 AS-Interface master module
Interface	1 communications interface RS 485	AS-Interface
Supported protocols:	– MPI slave – PROFIBUS DP slave	AS-Interface
Transmission rate	9,600 baud up to 12 Mbaud adaptive	– max. 5 ms cycle time with 31 slaves – max. 10 ms cycle time with 62 slaves
Connectable stations:	– Text displays TD 100C, TD 200, TD 200C, TD 400C – Operator panels, touch panels – PG/PC with MPI interface (CPU download/status via STEP 7-Micro/WIN possible) – CPU S7-300/400 – PROFIBUS DP master or slaves	max. 62 AS-Interface slaves
Status displays	CPU error, power, DP error, DX mode	Status displays for slaves, error displays
Station address	Adjustable on module (0–99)	Not necessary
Galvanic isolation	500 V AC	no
Max. cable length (without repeater)	1200 m (at 93.75 kbaud)	100 m
Removable terminal strip	no	no
V DC Requirement +5 V DC/+24 V DC	150 mA/max. 180 mA	220 mA/100 mA
Dissipation	2.5 W	3.7 W
Dimensions (W x H x D in mm)	71.2 x 80 x 62	71.2 x 80 x 62
Weight	175 g	250 g

Modem communication modules	EM 241 modem module	SINAUT MD 720-3 <sup>2</sup>
	Analog telephone connection	GPRS/GSM modem connection
Isolation (phone line against Logic and ...)	1500 V AC (galvanic)	–
Cable connector	RJ11 (6 points, 4-wire)	SMA/50 ohm (antenna) RS 232, jack: D-SUB 9-pin
Modem standards	Bell 103, Bell 212, V.21, V.22, V.22 bis, V.23c, V.32, V.32 bis, V.34 (standard)	GPRS/CSD/quadband 850/900/1800/1900 MHz V.24/V.28 (standard)
Safety features	Password, callback	–
Calling method	Pulse or tone dialing	–
Messaging protocols (SMS)	Numerical TAP (alphanumeric) UCP commands 1, 30, 5	SMS/AT commands –
Industrial standard protocols	Mode RTU, PPI, integrated functions for data exchange	–
V DC Requirement +5 V DC/+24 V DC	80 mA/70 mA	12–30 V DC (24 V DC nominal)
Dissipation	2.1 W	5.5 W
Dimensions (W x H x D in mm)	71.2 x 80 x 62	22.5 x 99 x 114
Weight	190 g	150 g

1) As SIPLUS component also for extended temperature range –25...+70 °C and aggressive atmospheres/condensation ([www.siemens.com/siplus](http://www.siemens.com/siplus))

2) Quadband antenna ANT 794-4MR required

<b>Ethernet/Internet communication modules</b>	<b>CP 243-1</b>	<b>CP 243-1 IT</b>
Transmission rate	10/100 Mbit/s	10/100 Mbit/s
Interfaces (connection to Industrial Ethernet)	RJ45	RJ45
Supply voltage	24 V DC	24 V DC
V DC Requirement +5 V DC/+24 V DC	55 mA/60 mA	55 mA/60 mA
Dissipation	1.75 W	1.75 W
Dimensions (W x H x D in mm)	71.2 x 80 x 62	71.2 x 80 x 62
Weight	150 g	150 g
<b>S7/PG communication</b>		
Number of operable connections	8 S7 connections + 1 PG connection	8 S7 connections + 1 PG connection
Configuration	with STEP 7-Micro/WIN (V3.2 SP1 or later)	with STEP 7-Micro/WIN (V3.2 SP3 or later)
<b>IT communications</b>		
Number of connections to an e-mail server	–	1
E-mail client	–	32 e-mails with max. 1024 characters
Number of FTP/HTTP connections	–	1/4
Adjustable access protection	–	8 users
Memory capacity of the file system	–	8 Mbytes

