SIEMENS

Data sheet   **6ES7540-1AB01-0AA0**

SIMATIC S7-1500, CM PTP RS422/485 BA communications module for serial connection RS-422 and RS-485 freeport, 3964(R), USS, 19200 bit/s, 15-pin D-sub socket

General information	
Product type designation	CM PtP RS 422 / 485 BA
Product function	
● I&M data	Yes; I&M 0
● Fast startup	Yes
Engineering with	
● STEP 7 TIA Portal configurable/integrated from version	V18 with HSP 0367 / V19; with older TIA Portal versions configurable as 6ES7540-1AB00-0AA0
● STEP 7 configurable/integrated from version	V5.5 SP2 with GSD file
● PROFIBUS from GSD version/GSD revision	- / -
● PROFINET from GSD version/GSD revision	GSDML V2.42
Installation type/mounting	
Rail mounting	Yes; S7-1500 mounting rail
Supply voltage	
Design of the power supply	system power supply
Input current	
Current consumption (rated value)	43 mA; From the backplane bus
Power	
Power consumption from the backplane bus	0.65 W
Power loss	
Power loss, typ.	0.6 W
Address area	
Address space per module	
● Inputs	8 byte; performance mode: 32 byte
● Outputs	0 byte; performance mode: 32 byte
Interface types	
RS 485	
● Transmission rate, max.	19.2 kbit/s
● Cable length, max.	1 200 m
RS 422	
● Transmission rate, max.	19.2 kbit/s
● Cable length, max.	1 200 m
● 4-wire full duplex connection	Yes
● 4-wire multipoint connection	No
Protocols	
Integrated protocols	
Freeport	
— Telegram length, max.	1 kbyte
— Bits per character	7 or 8
— Number of stop bits	1 or 2 bit
— Parity	None, even, odd, always 1, always 0, any
3964 (R)	
— Telegram length, max.	1 kbyte
— Bits per character	7 or 8
— Number of stop bits	1 or 2 bit
— Parity	None, even, odd, always 1, always 0, any
Telegram buffer	
● Buffer memory for telegrams	2 kbyte
● Number of telegrams which can be buffered	255
Interrupts/diagnostics/status information	

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Diagnostics function	Yes
Alarms	
● Diagnostic alarm	Yes
● Hardware interrupt	No
Diagnoses	
● Wire-break	Yes
Diagnostics indication LED	
● RUN LED	Yes; green LED
● ERROR LED	Yes; red LED
● Receive RxD	Yes; Yellow LED
● Transmit TxD	Yes; Yellow LED

Potential separation

between backplane bus and interface	Yes

Isolation

Isolation tested with	707 V DC (type test)

product functions / security / header

signed firmware update	Yes

Ambient conditions

Ambient temperature during operation	
● horizontal installation, min.	-30 °C
● horizontal installation, max.	60 °C
● vertical installation, min.	-30 °C
● vertical installation, max.	40 °C
Altitude during operation relating to sea level	
● Installation altitude above sea level, max.	5 000 m; restrictions for installation altitudes > 2 000 m, see ET 200MP system manual

Decentralized operation

to SIMATIC S7-300	Yes
to SIMATIC S7-400	Yes
to SIMATIC S7-1500	Yes
to standard PROFINET controller	Yes

Dimensions

Width	35 mm
Height	147 mm
Depth	127 mm

Weights

Weight, approx.	0.22 kg

Classifications

	Version	Classification
eClass	14	27-24-22-08
eClass	12	27-24-22-08
eClass	9.1	27-24-22-08
eClass	9	27-24-22-08
eClass	8	27-24-22-08
eClass	7.1	27-24-22-08
eClass	6	27-24-22-08
ETIM	9	EC001423
ETIM	8	EC001423
ETIM	7	EC001423

Approvals / Certificates

General Product Approval

CE EG-Konf.   UKCA   [Manufacturer Declaration](#)   [Miscellaneous](#)   UL   RCM

EMV	For use in hazardous locations

KC		FM	CCC-Ex	Miscellaneous	

For use in hazardous locations		Maritime application			
Type Examination Certificate	IECEx	ABS	BUREAU VERITAS	DNV	Lloyd's Register LRS

Maritime application			
NK / Nippon Kaiji Kyokai	RINA	CCS (China Classification Society)	KR KOREAN REGISTER

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