MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS

6ES7137-6AA01-0BA0

SERIAL POINT-TO-POINT INTERFACE MODULE

Used with the applicable SIMATIC ET 200SP configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens 6ES7137-6AA01-0BA0 technical data and applicable product instructions

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Data sheet 6ES7137-6AA01-0BA0



Figure similar

SIMATIC ET 200SP, CM PTP communication module for serial connection RS-422, RS-485 and RS-232, freeport, 3964 (R), USS, MODBUS RTU master, slave, max. 250 Kbit/s, suitable for BU type A0, pack quantity: 1 unit

General information	
Product type designation	CM PtP
Firmware version	
● FW update possible	Yes
usable BaseUnits	BU type A0
Product function	
● I&M data	Yes; I&M0 to I&M3
Engineering with	
● STEP 7 TIA Portal configurable/integrated from version	STEP 7 V17 or higher
● STEP 7 configurable/integrated from version	via GSD as of V5.6 HF4
● PROFIBUS from GSD version/GSD revision	GSD as of Revision 5
● PROFINET from GSD version/GSD revision	GSDML V2.34
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Input current	
Current consumption (rated value)	31 mA
Current consumption, max.	35 mA
Power loss	
Power loss, typ.	0.7 W
Address area	
Address space per module	
● Inputs	8 byte; performance mode: 32 byte
● Outputs	0 byte; performance mode: 32 byte
Hardware configuration	
Automatic encoding	Yes
● Mechanical coding element	Yes
● Type of mechanical coding element	type D
1. Interface	
Interface types	
● RS 485	Yes
● RS 422	Yes
● RS 232	Yes
● Design of the connection	Push-in terminal
Interface types	
RS 232	
● Transmission rate, max.	115.2 kbit/s

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● Cable length, max.	15 m
● RS 232 auxiliary signals	RTS, CTS, DTR, DSR, RI, DCD
RS 485	
● Transmission rate, max.	250 kbit/s
● Cable length, max.	1 200 m; 100 to 1200 m, depending on transmission speed
RS 422	
● Transmission rate, max.	115.2 kbit/s
● Cable length, max.	1 200 m
● 4-wire full duplex connection	Yes
● 4-wire multipoint connection	Yes
Protocols	
Integrated protocols	
Freeport	
— Telegram length, max.	2 kbyte; performance mode: receive data max. 24 byte and send data max. 30 byte
— 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.	2 kbyte; performance mode: receive data max. 24 byte and send data max. 30 byte
— Bits per character	7 or 8
— Number of stop bits	1 or 2 bit
— Parity	None, even, odd, always 1, always 0, any
Modbus RTU master	
— Address area	1 to 247, extended 1 to 65535
— max. number of devices	32
protocols / Modbus RTU device / header	
— Address area	1 to 247, extended 1 to 65535
Telegram buffer	
● Buffer memory for telegrams	4 kbyte
● Number of telegrams which can be buffered	255
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
● Diagnostic alarm	Yes
● Hardware interrupt	No
Diagnoses	
● Wire-break	Yes
Diagnostics indication LED	
● Monitoring of the supply voltage (PWR-LED)	Yes; green PWR LED
● for module diagnostics	Yes; green/red DIAG LED
● Receive RxD	Yes; green LED
● Transmit TxD	Yes; green LED
Potential separation	
between backplane bus and interface	Yes
Isolation	
Isolation tested with	707 V DC (type test)
Standards, approvals, certificates	
Ecological footprint	
● environmental product declaration	Yes
Global warming potential	
— global warming potential, (total) [CO2 eq]	25.2 kg
— global warming potential, (during production) [CO2 eq]	6.15 kg
— global warming potential, (during operation) [CO2 eq]	19.4 kg
— global warming potential, (after end of life cycle) [CO2 eq]	-0.289 kg
Ambient conditions	
Ambient temperature during operation	
● horizontal installation, min.	-30 °C

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● horizontal installation, max.	60 °C
● vertical installation, min.	-30 °C
● vertical installation, max.	50 °C
Altitude during operation relating to sea level	
● Installation altitude above sea level, max.	5 000 m
Decentralized operation	
to SIMATIC S7-300	Yes
to SIMATIC S7-400	Yes
to SIMATIC S7-1200	Yes
to SIMATIC S7-1500	Yes
to standard PROFINET controller	Yes
Dimensions	
Width	15 mm
Height	73 mm
Depth	58 mm
Weights	
Weight, approx.	30 g

Classifications

	Version	Classification
eClass	14	27-24-26-08
eClass	12	27-24-26-08
eClass	9.1	27-24-26-08
eClass	9	27-24-26-08
eClass	8	27-24-26-08
eClass	7.1	27-24-26-08
eClass	6	27-24-26-08
ETIM	9	EC001604
ETIM	8	EC001604
ETIM	7	EC001604
IDEA	4	3564
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval

Manufacturer Declaration | Miscellaneous

EMV

KC

For use in hazardous locations

UL | CCC-Ex | FM | ATEX | IECEx

For use in hazardous locations

Miscellaneous

Marine / Shipping

ABS | BUREAU VERITAS | DNV | LRS | NK / Nippon Kaiji Kyokai

Marine / Shipping

Environment

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CCS (China Classification Society)





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