



Figure similar

SIPLUS ET 200SP CM CAN rail based on 6ES7137-6EA00-0BA0 with conformal coating, -40...+60 °C, OT2 with ST1/2 (+70 °C für 10 minutes), gateway to CAN Bus or CANopen networks, CAN 2.0A/B, CANopen Manager to CiA301/302, CANopen Slave to CiA301/302, IP20

General information	
Product type designation	CM 1x CAN ST
Firmware version	
• FW update possible	Yes
based on	<a href="#">6ES7137-6EA00-0BA0</a>
usable BaseUnits	BU type A0
Color code for module-specific color-coded label	CC00
Product function	
• I&M data	Yes; I&M0 to I&M3
• Module swapping during operation (hot swapping)	Yes
• Isochronous mode	No
Engineering with	
• STEP 7 TIA Portal configurable/integrated from version	see entry ID: 109746275
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, typ.	20 mA
Current consumption, max.	25 mA
Power loss	
Power loss, typ.	0.5 W
Address area	
Address space per module	
• Address space per module, max.	256 byte
1. Interface	
Interface type	CAN according to CiA 303-1
Isolated	Yes; 500 V AC or 707 V DC
Interface types	
• Number of ports	1
• Design of the connection	Push-in terminal
CAN	
• CAN operating modes	CAN Standard CAN 2.0A/B; CANopen Manager / Slave acc. to CiA
• Specification acc. to CiA	CiA 301 & CiA 302
• Transmission rate, min.	10 kbit/s
• Transmission rate, max.	1 000 kbit/s
• max. number of devices	60

<ul style="list-style-type: none"> <li>• Number of SDOs in parallel</li> </ul>	16; Parallel
<ul style="list-style-type: none"> <li>• Number of PDOs</li> </ul>	128; Send / receive
<b>Services</b>	
— Node/life-guarding	Yes
— Heartbeat	Yes
— SYNC	Yes
<b>Interrupts/diagnostics/status information</b>	
Alarms	Yes
Diagnostics function	Yes
<b>Diagnostics indication LED</b>	
<ul style="list-style-type: none"> <li>• RUN LED</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• ERROR LED</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• MAINT LED</li> </ul>	No
<ul style="list-style-type: none"> <li>• Monitoring of the supply voltage (PWR-LED)</li> </ul>	Yes; green PWR LED
<b>Potential separation</b>	
between backplane bus and interface	Yes
<b>Isolation</b>	
Isolation tested with	750 V DC (type test) and according to EN 50155 (routine test)
<b>Standards, approvals, certificates</b>	
<b>Ecological footprint</b>	
<ul style="list-style-type: none"> <li>• environmental product declaration</li> </ul>	Yes
<b>Global warming potential</b>	
— 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
<b>Railway application</b>	
<ul style="list-style-type: none"> <li>• EN 50121-3-2</li> </ul>	Yes; EMC for rail vehicles
<ul style="list-style-type: none"> <li>• EN 50121-4</li> </ul>	Yes; EMC for signal and telecommunications systems
<ul style="list-style-type: none"> <li>• EN 50121-5</li> </ul>	Yes; EMC for fixed installations and railway power supply equipment (shielded cables required)
<ul style="list-style-type: none"> <li>• EN 50124-1</li> </ul>	Yes; Railway applications - overvoltage category OV2; pollution degree PD2; rated surge voltage UNi = 0.5 kV; UNm = 24 V DC
<ul style="list-style-type: none"> <li>• EN 50125-1</li> </ul>	Yes; Rail vehicles - see ambient conditions
<ul style="list-style-type: none"> <li>• EN 50125-2</li> </ul>	Yes; Stationary electrical equipment - see ambient conditions
<ul style="list-style-type: none"> <li>• EN 50125-3</li> </ul>	Yes; Signal and telecommunications systems - see ambient conditions; vibrations and shocks: Application point outside of tracks (1 m to 3 m away from track)
<ul style="list-style-type: none"> <li>• EN 50155</li> </ul>	Yes; Rail vehicles - temperature class OT2, ST1/ST2, horizontal mounting position
<ul style="list-style-type: none"> <li>• EN 61373</li> </ul>	Yes; Rail vehicles - vibrations and shocks: Category 1 Class A/B
<ul style="list-style-type: none"> <li>• Fire protection acc. to EN 45545-2</li> </ul>	Yes; For proof of conformity, see Service & Support
<b>Ambient conditions</b>	
<b>Ambient temperature during operation</b>	
<ul style="list-style-type: none"> <li>• horizontal installation, min.</li> </ul>	-40 °C; = Tmin (incl. condensation/frost)
<ul style="list-style-type: none"> <li>• horizontal installation, max.</li> </ul>	60 °C; = Tmax; +70 °C for 10 min (OT2, ST1/ST2 acc. to EN 50155); +70 °C continuously with spacing modules (6AG2193-6BN00-4BA0) or configured slots to the left and right of the module (OT4, ST0 acc. to EN 50155)
<ul style="list-style-type: none"> <li>• vertical installation, min.</li> </ul>	-40 °C; = Tmin
<ul style="list-style-type: none"> <li>• vertical installation, max.</li> </ul>	50 °C; = Tmax
<ul style="list-style-type: none"> <li>• ceiling installation, min.</li> </ul>	-40 °C; = Tmin
<ul style="list-style-type: none"> <li>• ceiling installation, max.</li> </ul>	50 °C; = Tmax
<ul style="list-style-type: none"> <li>• floor installation, min.</li> </ul>	-40 °C; = Tmin
<ul style="list-style-type: none"> <li>• floor installation, max.</li> </ul>	50 °C; = Tmax
<b>Altitude during operation relating to sea level</b>	
<ul style="list-style-type: none"> <li>• Installation altitude above sea level, max.</li> </ul>	2 000 m
<ul style="list-style-type: none"> <li>• Ambient air temperature-barometric pressure-altitude</li> </ul>	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m)
<b>Relative humidity</b>	
<ul style="list-style-type: none"> <li>• With condensation, tested in accordance with IEC 60068-</li> </ul>	100 %; RH incl. condensation / frost (no commissioning in bedewed state),

2-38, max.	horizontal installation	
<b>Resistance</b>		
<b>Coolants and lubricants</b>		
— Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air	
<b>Use in stationary industrial systems</b>		
— to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	
— to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	
— to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *	
— Against mechanical environmental conditions acc. to EN 60721-3-3	Yes; Class 3M8 using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0)	
<b>Use on land craft, rail vehicles and special-purpose vehicles</b>		
— to biologically active substances according to EN 60721-3-5	Yes; Class 5B2 mold, fungus and dry rot spores (with the exception of fauna); Class 5B3 on request	
— to chemically active substances according to EN 60721-3-5	Yes; Class 5C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	
— to mechanically active substances according to EN 60721-3-5	Yes; Class 5S3 incl. sand, dust; *	
— Against mechanical environmental conditions acc. to EN 60721-3-5	Yes; Class 5M2 using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0)	
— against mechanical environmental conditions in agriculture acc. to ISO 15003	Yes; level 1 (Location LE) using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0)	
<b>Usage in industrial process technology</b>		
— Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)	
— Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	
<b>Remark</b>		
— Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* The supplied plug covers must remain in place over the unused interfaces during operation!	
<b>Conformal coating</b>		
<ul style="list-style-type: none"> <li>● Coatings for printed circuit board assemblies acc. to EN 61086</li> <li>● Protection against fouling acc. to EN 60664-3</li> <li>● Electronic equipment on rolling stock acc. to EN 50155</li> <li>● Military testing according to MIL-I-46058C, Amendment 7</li> <li>● Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A</li> </ul>	<p>Yes; Class 2 for high reliability</p> <p>Yes; Type 1 protection</p> <p>Yes; Class PC2 protective coating acc. to EN 50155:2017</p> <p>Yes; Discoloration of coating possible during service life</p> <p>Yes; Conformal coating, Class A</p>	
<b>Decentralized operation</b>		
to SIMATIC S7-300	No	
to SIMATIC S7-400	No	
to SIMATIC S7-1200	Yes	
to SIMATIC S7-1500	Yes	
<b>Dimensions</b>		
Width	15 mm	
Height	73 mm	
Depth	58 mm	
<b>Weights</b>		
Weight, approx.	32 g	
<b>Other</b>		
Note:	for use in railway applications, also observe the product information "SIPLUS extreme RAIL" A5E37661960A, Online Support article 109736776	
<b>Classifications</b>		
	<b>Version</b>	<b>Classification</b>
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	10	EC001604
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](#)



[China RoHS](#)



[China RoHS](#)

<b>General Product Approval</b>	<b>EMV</b>	<b>Railway</b>	<b>Environment</b>
---------------------------------	------------	----------------	--------------------



[Confirmation](#)



last modified:

10/23/2025