SIMATIC S7-1200 Basic Controllers
I/O modules
Special modules

SIPLUS CMS1200 SM 1281 Condition Monitoring

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Technical specifications (continued)

Article number	**6AT8007-1AA10-0AA0**
	SM1281_Condition_Monitoring
Measuring functions	
• Physical measuring principle	Vibration acceleration
Measuring range	
- Measurement range vibration frequency, min.	0.1 Hz
- Measurement range vibration frequency, max.	10 000 Hz
Degree and class of protection	
Degree of protection acc. to EN 60529	
• IP20	Yes
Standards, approvals, certificates	
Certificate of suitability	CE
Reference designation according to DIN EN 81346-2	P
Ambient conditions	
Free fall	
• Fall height, max.	0.3 m; five times, in product package
Ambient temperature during operation	
• horizontal installation, min.	-20 °C
• horizontal installation, max.	60 °C
• vertical installation, min.	-20 °C
• vertical installation, max.	45 °C
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Air pressure acc. to IEC 60068-2-13	
• Operation, min.	795 hPa
• Operation, max.	1 080 hPa
• Storage/transport, min.	660 hPa
• Storage/transport, max.	1 080 hPa
Relative humidity	
• Operation without condensation, min.	5 %
• Operation without condensation, max.	95 %
Software	
Browser software required	Web browser Mozilla Firefox (ESR31) or Microsoft Internet Explorer (10/11)
Connection method	
required front connector	Yes
Design of electrical connection	Screw connection
Mechanics/material	
Material of housing	Plastic: polycarbonate, abbreviation: PC- GF 10 FR
Enclosure material (front)	
• Plastic	Yes
Dimensions	
Width	70 mm
Height	112 mm
Depth	75 mm
Weights	
Weight, approx.	260 g

Ordering data

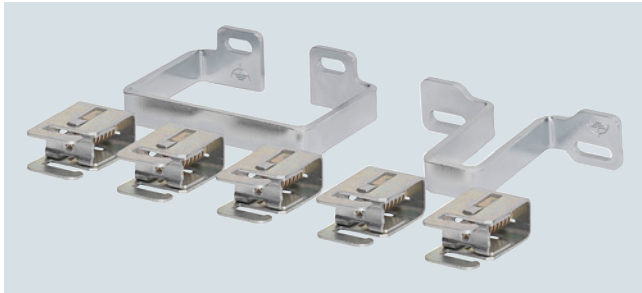|	Article No.
SIPLUS CMS1200 SM 1281 Condition Monitoring	**6AT8007-1AA10-0AA0**
Module for SIMATIC S7-1200 for monitoring vibrations in mechanical components based on characteristic values and frequency-selective analysis functions.	
Accessories	
SIPLUS CMS1200 SM1281 shield clamp set	**6AT8007-1AA20-0AA0**
For the EMC-compliant connection of signal and encoder cables to the SIPLUS CMS1200 SM 1281 Condition Monitoring.	
VIB-SENSOR S01 vibration sensor	**6AT8002-4AB00**
Piezoelectric sensor for connection to the SIPLUS CMS1200 SM 1281 Condition Monitoring.	
SIPLUS CABLE-MIL	
For connection of the VIB-SENSOR S01 vibration sensor to the SIPLUS CMS1200 SM 1281 Condition Monitoring.	
SIPLUS CABLE-MIL-300; length 3 m	**6AT8002-4AC03**
SIPLUS CABLE-MIL-1000; length 10 m	**6AT8002-4AC10**

Products for Specific Requirements
Condition monitoring systems
SIPLUS CMS1200 Condition Monitoring System

Accessories

■ Overview

SIPLUS CMS1200 SM 1281 shield clamp set

CMS1200 accessories

SIPLUS CMS1200 SM 1281 shield clamp set,
6AT8007-1AA20-0AA0

An additional shield clamp set must be ordered for the
EMC-compliant connection of cables to the
SIPLUS CMS1200 SM 1281 Condition Monitoring.

The shield clamp set comprises two shield clamps and five
terminal clamps. One shield clamp is screwed on above and
one below the module. The sensor cable shields are connected
to the shield clamps by means of the terminal clamps.

VIB-SENSOR S01 vibration sensor

VIB-SENSOR S01 vibration sensor

VIB-SENSOR S01 6AT8002-4AB00 vibration sensor

The VIB-SENSOR S01 vibration sensor with IEPE (integrated
electronics piezo-electric) interface can be directly connected to
the CMS1200 SM1281 Condition Monitoring module.

The sensor detects vibration accelerations in the frequency
range from 0.5 Hz to 15 kHz with a resolution of 100 mV/g.

A threaded screw with an M8 thread for mounting to the measur-
ing point is included in the scope of supply. The connecting
cable is connected to the vibration sensor via the MIL connector.
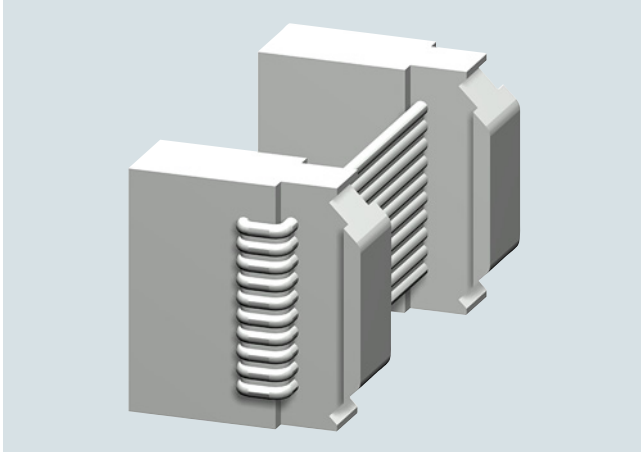
SIPLUS CABLE-MIL connecting cables

SIPLUS CABLE-MIL connecting cables

SIPLUS CABLE-MIL connecting cables 6AT8002-4AC03,
6AT8002-4AC10

The VIB-SENSOR S01 vibration sensor is connected to the
SIPLUS CMS1200 SM1281 Condition Monitoring module by
means of the SIPLUS CABLE-MIL connecting cable.

This high-quality industrial cable is made of black polyurethane
and is pre-assembled on one end with a MIL connector
(MIL-C5015). The open cable end of the shielded two-wire cable
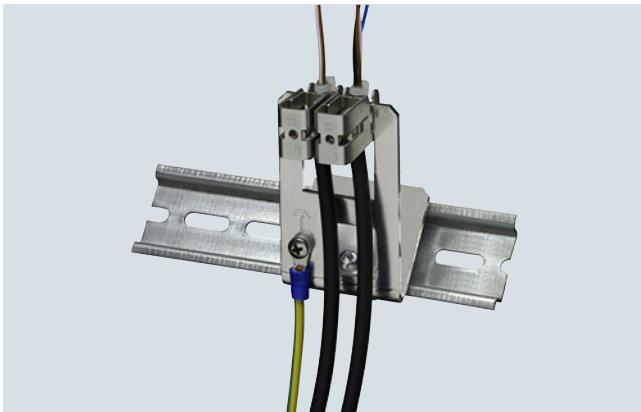is connected directly to the screw terminals of the basic unit.

The connecting cable is available in lengths of 3 m and 10 m.

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Overview

SIMOCODE connecting cables

SIMOCODE connecting cable 3UF7930-0AA00-0

The connecting cable is used for connecting the
SIPLUS CMS2000 Basic Unit VIB to the
SIPLUS CMS2000 VIB-MUX expansion modules and the
temperature modules via the SIMOCODE system bus interface.

The connecting cable with a length of 0.025 m must be used for
side-by-side mounting of the basic unit and
SIPLUS CMS2000 VIB-MUX expansion modules or temperature
modules on a TH 35-15 standard DIN rail in accordance with
IEC 60715.

Shield connection

6AT8002-4AA00 shield connection

A separate shield connection must be ordered for the EMC-
compliant connection of signal and encoder cables to the
SIPLUS CMS2000 Basic Unit VIB and the
SIPLUS CMS2000 VIB-MUX expansion module.

The shield connection comprises two shield clamps and five
terminal clamps. One shield clamp each is attached to the
DIN rail above and below the basic unit. The sensor cable
shields are connected to the shield clamps by means of the
terminal clamps.

VIB-SENSOR S01 vibration sensor

VIB-SENSOR S01 vibration sensor 6AT8002-4AB00

The VIB-SENSOR S01 vibration sensor with IEPE (integrated
electronics piezo-electric) interface can be directly connected to
the SIPLUS CMS2000 Basic Unit VIB and the
SIPLUS CMS2000 VIB-MUX expansion module.

The sensor detects vibration accelerations in the frequency
range from 0.5 Hz to 15 kHz with a resolution of 100 mV/g.

A threaded screw with an M8 male thread for mounting to the
measuring point is included in the scope of supply. The
connecting cable is connected to the vibration sensor via the
MIL connector.

SIPLUS CABLE-MIL connecting cables

SIPLUS CABLE-MIL connecting cables 6AT8002-4AC03,
6AT8002-4AC10

The VIB-SENSOR S01 vibration sensor is connected to the
SIPLUS CMS2000 Basic Unit VIB or the
SIPLUS CMS2000 VIB-MUX expansion module by means of the
SIPLUS CABLE-MIL connecting cable.

This high-quality industrial cable is made of black polyurethane
and is pre-assembled on one end with a MIL connector
(MIL-C5015). The open cable end of the shielded two-wire cable
is connected directly to the screw terminals of the basic unit.

The connecting cable is available in lengths of 3 m and 10 m.

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