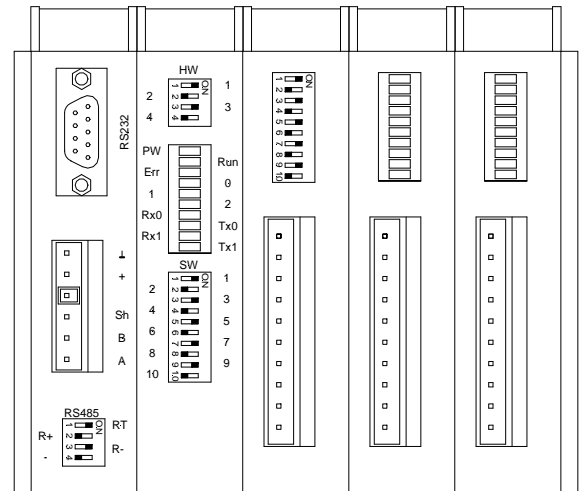


AD-CPU167

Main Unit with C167 Processor

- 16-bit SAB C167 processor, 1 MB back-up RAM, 512 KB FLASH, RTC, EEPROM
- RS232 and RS485 serial interface (galvanically separated), line state indication by LED
- Programmable DIP switch
- 10 LED status column
- 35 mm DIN rail mounting
- Self-stacking connection of I/O modules by using a special internal bus (max. 16 modules)
- Programming and debugging by DetStudio



TECHNICAL DATA

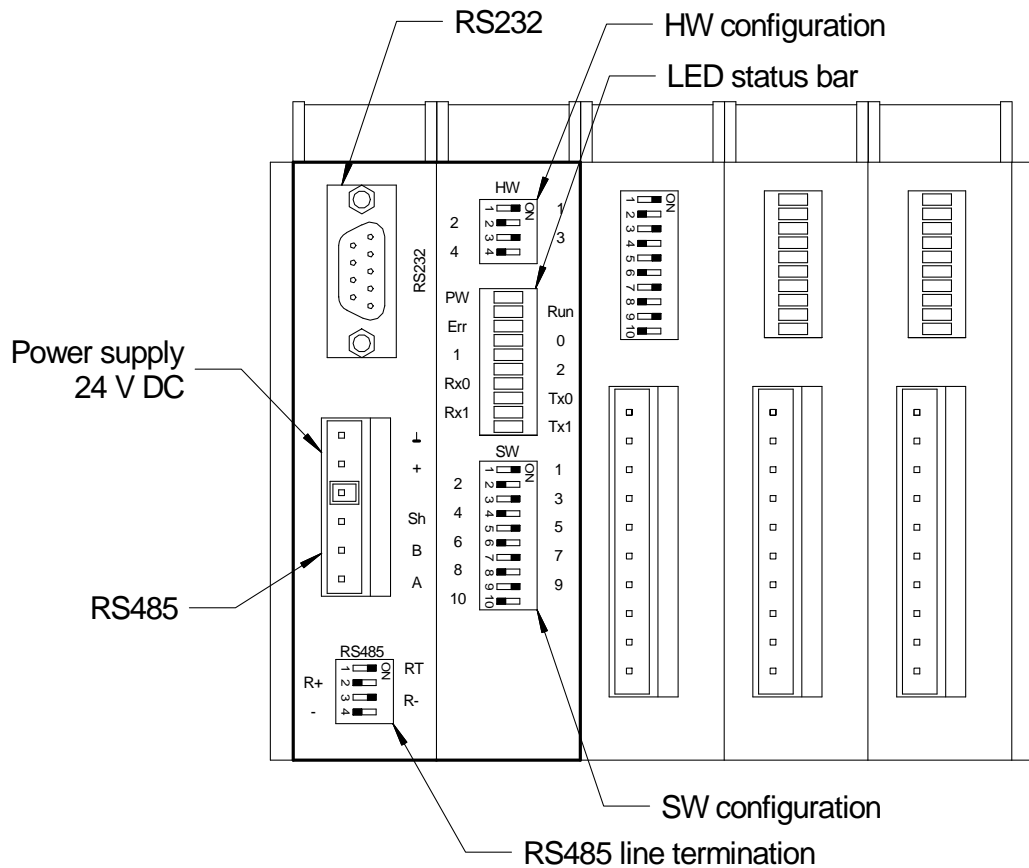
CPU	SAB C167-CR
Real time circuit (RTC)	Time HH:MM:SS, date DD:MM:YY
FLASH memory	512 KB
RAM memory	1 MB
EEPROM memory	2 KB
Back-up battery lifetime (RAM + RTC)	5 years
Communication	
RS232	Without galvanic separation
Signals	RxD, TxD, RTS, CTS, DTR, DSR
RS485	Galvanic separation *)
Power supply	24 V DC \pm 20 %
Reference voltage	Internal, 5.000 V DC \pm 1 mV
Power consumption (without modules)	Max. 150 mA at 24 V DC
Max. consumption from internal source +5 V DC	1.6 A DC
Max. consumption from internal source +24 V DC	2 A DC
Others	
Main unit location	First from the left
Max. number of I/O modules	16
Signal connection	WAGO 231 cage clamp connectors
Cover protection rate	IP20
AD-CPU167/1M operating temperature	0 to 70 °C
AD-CPU167I1M operating temperature	-40 to 70 °C
Max. ambient humidity	< 95 % non-condensing
Mounting	35 mm DIN rail
Weight	280 g
Dimensions (w x h x d)	54 x 104 x 96 mm

*) Insulation strength 500 V AC / 1 minute, galvanic separation may not be used for safe and unsafe parts separation.

ORDERING INFORMATION

AD-CPU167/1M	Main unit with connectors, user's manual, warranty card
AD-CPU167I1M	Main unit with temperature range -40 to 70 °C, user's manual, warranty card
KABEL 232P	RS232 to PC connecting cable

CONNECTORS AND CONFIGURATION ELEMENTS PLACEMENT



DIP SWITCH DESCRIPTION

HW configuration	
1	XX – CFG configuration, SW depending
2	ON – FLASH write access enabled
3	ON – Bootstrap enabled
4	ON – System reset from RS232 line (CTS)
SW configuration	
1 .. 10	Programmable

Note: System response on the CFG DIP switch setting depends on application software.
The settings of the SW switch for NOS operating system are described in the DetStudio help.

RS485 SETTING

DIP	Description	Assignment
1	RT	Line termination (120 Ohm)
2	R+	Line A idle status *)
3	R-	Line B idle status *)
4	-	Not used

*) Second and third switch has to be always connected or disconnected together.

RS232 WIRING (CANON 9)

PIN	ASSIGNMENT	TYPE
1	Not used	-
3	RxD	Input
5	GND	-
7	CTS	Input
9	Not used	-

PIN	ASSIGNMENT	TYPE
2	TxD	Output
4	DSR	Input
6	DTR	Output
8	RTS	Output

Note: The ASSIGNMENT column shows the ADiS167 control system signals. These signals are cross-connected to the PC side.
The TYPE column means signal type on the ADiS167 system.