

Module for AC Converter

Module for AC signal inputs into pulse outputs



Description

The module M83200 converts AC signal inputs into pulse outputs and provides configurable 5 V outputs.

The module M83200 contains:

- 4 independent AC signal converters
 - To adapt low amplitude AC (e.g. sinusoidal) signals of various sensors to the counter inputs of Meteo-40 plus data loggers. The sinusoidal signal is converted in a rectangular pulse signal with the same frequency.
- 2 individually configurable ports with the following configuration options:
 - Current limit to 10 mA (470 Ω)
 - Pull-up resistor 5.1 kΩ with current limit 1 mA
 - Stabilised and ripple-free 5 V output with active current limit 110 mA

Specifications

Electrical characteristics (Default settings)				
Parameter	Pin / Ports	Min	Typical	Max
Supply voltage (DC)	13	9 V		32 V
Quiescent current		11 mA		16 mA
Ground GND	15			
Configurable Outputs				
Output (5 V DC) ($\vartheta = 25^{\circ}\text{C}$)	14, 16	5.2 V 110 mA		5.8 V 130 mA
Pull-up current limit 1 mA (Low current configuration 5.1 kΩ)	14, 16	0.97 mA		1.05 mA
Pull-up current limit 10 mA (High current configuration)	14, 16	10.5 mA		11.4 mA
AC Voltage Converters				

Electrical characteristics (Default settings)				
Input sensitivity of converter	2, 3, 6, 7	115 mV		120 mV
Ground GND	4, 8			
Output level low	9, 10, 11, 12	0 V		0.01 V
Output level high	9, 10, 11, 12	5 V		5.8 V
Operating temperature		-40°C		+75°C
Fuse T0.8A (time lag, slow-blow): 5 x 20 mm				

Housing dimension (width x height x depth): 22.5 x 110 x 115 mm

Mounting on DIN-rail (35 x 7.5 mm)

Terminal: wire cross section from 0.25 to 1.5 mm²

Terminal Earth: recommended wire cross section 1.5 mm²

(Keep wire length as short as possible)