

## Telegram Converter



The WinPP8 test program requires a message (telegram) converter for SINAUT 8-FW DPDM messages, see Figure 3. The message converter (TeKo) converts digitally pulse-duration modulated messages (DPDM, designated as PDM in the following text) to pulse-code modulated (PCM) messages and vice-versa. During conversion, it tests if the pulses and the blocking time are correct. The set points are predefined by WinPP8. The message converter is equipped with a PDM interface and a PCM interface. Via the PDM interface, it is connected to the telecontrol system to receive and transmit PDM messages. Via the PCM interface, it is connected to the PC (WinPP8) to receive and transmit PCM messages.

Both interfaces process RS232 signals. They are electrically isolated from each other and from the power supply unit. The PDM interface is equipped with two receivers and one transmitter. The receiver and the transmitter are electrically isolated from each other.

The message converter is equipped with the following LEDs:

Active	Ready for operation, green, flashing. The LED starts to flash approximate 15 seconds after power ON.
RxD <sub>1</sub>	PDM receiver 1 green, lights up for positive voltage red, lights up for negative voltage
RxD <sub>2</sub>	PDM receiver 2 green, lights up for positive voltage red, lights up for negative voltage
TxD	PDM transmitter green, lights up for positive voltage red, lights up for negative voltage

**Housing and connections**

PDM interface:	9-pole DSUB male connector
Connector assignment:	2 Receiver 1
	4 Receiver 1 ground
	6 Receiver 2
	9 Receiver 2 ground
	3 Transmitter
	5 Transmitter ground
PCM interface:	9-pole DSUB female connector
Connector assignment:	2 Transmitter
	3 Receiver
	5 Ground
	1-8-7 and 4-6 and 5-9 are jumpered
Power supply:	5 VDC, +-5% via DIN 45323 NEB R 1 integrated interfacing for NES 1 plug-in connector 6,0 / 1,98.
Power consumption:	Typically 750 mA DC
Electrical isolation:	Min. 2 kV insulation voltage between supply voltage and serial interface
Housing:	Aluminium, 160 x 110 x 45 mm
Weight:	Approx. 800 g inclusive power supply unit

**Scope of supply**

- 1 piece PDM ó PCM message converter
- 1 piece plug-in power supply unit 100-240 VAC, 50-60 Hz, 5VDC
- 1 piece cable, 1.8 m, 9-pole DSUB male-female connector, 1 to 1 wired
- 1 piece adapter unit, 9-pole DSUB female connector to banana plug