Dräger Installation Manual
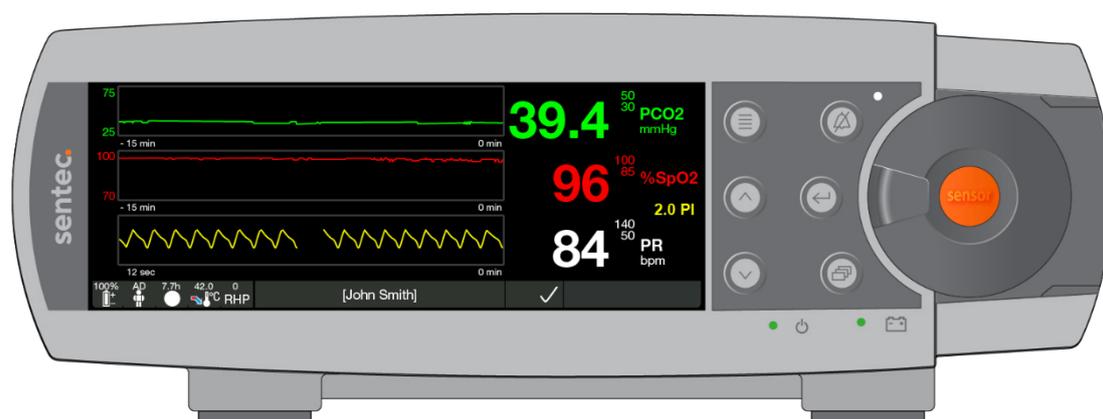
Interfacing the Sentec Digital Monitor (SDM) with the Dräger Medical Patient Monitoring System

(SDM Software Version SMB V08.00 or higher)

Contents

Introduction

The Sentec Digital Monitor (SDM) supports communication with Dräger Medical patient monitors via serial interface and interface box.

Once the connection between the SDM and the Dräger Medical Monitoring System is established, the SDM transfers transcutaneous measurements to the Dräger Medical patient monitor. Alarms and Messages are currently only displayed / audible on the SDM.

Note: The protocol is unidirectional, i.e. a Dräger Medical patient monitor can display data received from the SDM but cannot remotely control the SDM.

Note: Due to the specific features of interface protocol the data transmission from the SDM to a Dräger Medical patient monitor might be delayed by several seconds.

⚠️ **WARNING:** Accessory equipment connected to the SDM's data ports must be certified according to the IEC 60950 standard. All resulting combinations of equipment must be in compliance with the IEC standard 60601-1 systems requirements. Anyone who connects accessory equipment to the SDM configures a medical system and is, therefore, responsible for ensuring that the resulting system complies with the requirements of standard IEC 60601-1 and the electromagnetic compatibility standard IEC 60601-1-2.

⚠️ **WARNING:** When connecting/mounting the SDM to accessory equipment (e.g. PCs, PSG-Systems, (wireless) networks, roll stands, mounting plates, incubators, etc.)), verify proper operation before clinical use of the SDM and accessory equipment. In certain cases, it may be required that the SDM and the accessory equipment must be connected to a grounded AC outlet. In case of doubt consult qualified technicians.

⚠️ **WARNING:** The mains power supply of the Sentec Digital Monitor (SDM) is separated by two Means of Patient Protection (MOPPs) between the sensor port (for the applied part, the sensor) and the interface connectors. The three interface connectors – serial data port, Multipurpose I/O port (analog outputs, nurse call), LAN port – of the SDM are not separated from each other. If at a time accessory equipment is connected to only one of the three interface connectors no additional safety measures are necessary to comply with the requirements of IEC 60601-1. If, however accessory equipment is simultaneously connected to two or three of the SDM's interface connectors additional safety measures may be required to be compliant with the requirements of IEC 60601-1. In case of doubt consult qualified technicians.

Required Components / System Requirements

Components required from Sentec

	Sentec Digital Monitor (SDM) Product Code: SDM Software version SMB V08.00.x or higher is needed to connect to Dräger Medical Monitoring System. Note: The information provided in the present document refers to software version SMB V08.00 and higher.
	Serial Cable to connect Dräger Infinity Adapter with SDM Product Code: RS232C_MF

Components required from Dräger Medical

	Dräger Medical Monitoring System Connection is possible to the Infinity Monitoring systems: Infinity Delta Infinity Delta XL Infinity Kappa Infinity Omega Serie Older Models: SC Series 7000/9000, 9000XL, 8000 Note: Only monitors equipped with IDS Docking Station with MIB Connector functionality for MIB II Converter (partly upgradeable) are suitable for SDM connection.
	MIB (Medical Information BUS) Connector in Dräger Docking Station

	MIB II Converter (Dräger Medical) HB-006397-d 5
	Dräger Infinity Adapter Order Code : DI-A Available from Sentec
	Patch Cable for connection of the MIB II Converter to the MIB Connector in the Dräger Docking Station (as provided by Dräger)
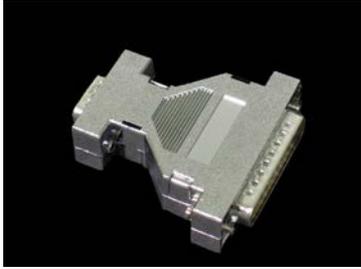
Setting up the connection

Note: The instructions below refer to the Dräger Medical Infinity Delta patient monitor. The procedure to set up the connection can slightly vary for other models.

To set-up a connection from the SDM to a Dräger Medical Infinity Delta patient monitor, proceed as follows:

1. Switch the Dräger Medical patient monitor OFF.

2. Localize the MIB Connector on Dräger Docking Station:

3. Connect the MIB II Converter to MIB Connector using the Patch Cable.

4. Connect the MIB II Converter to the Dräger Infinity Adapter.

5. Connect the Dräger Infinity Adapter to the SDM serial data port using the serial cable (use the screws to tighten the adapter to the cable and the SDM). Complete setup:

6. Switch the Dräger Medical patient monitor ON and select $tpCO_2$ and tpO_2 parameter on the Dräger Medical patient monitor (refer to corresponding patient monitor configurations manual).

7. On the SDM, set the menu-parameter "Interfaces / Serial Interface / Protocol" to "TCB-Protocol"

8. The communication between the SDM and the Dräger Medical patient monitor should be established within approx. 60 seconds.

Configurations

Configuration of the SDM

Set the menu-parameter "Interfaces / Serial Interface / Protocol" to
 "TCB-Protocol″

Configuration of the Display of the Dräger Medical Patient Monitor

Select $tpCO_2$ parameter on the Dräger Medical patient monitor (refer to corresponding patient monitor manual).

The following real-time data of the SDM are available on the Dräger Medical patient monitor:

Parameter	Name on Dräger Medical patient monitor	Type
PCO2	$tpCO_2$	Numeric and trend
PO2	tpO_2	Numeric and trend

Delta Monitor with tpO2 and tpCO2 configured as numeric:
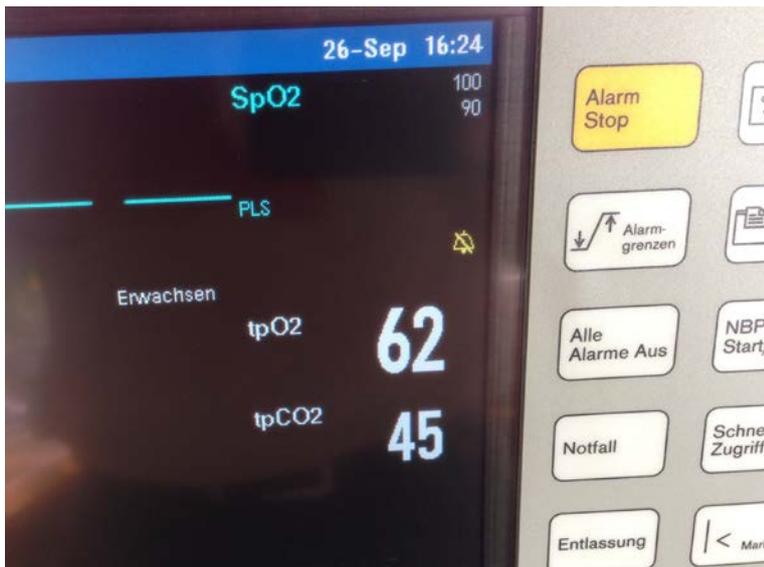
Alerts

Currently, the transfer of alarms is not handled by this interface. Alarms and information messages are displayed / audible on the SDM exclusively.

Care with Confidence

HB-006397-d
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