



DIAMENTOR® RS-KDK DIAMENTOR® RS-D

Combined dose and DAP meter

Highlights

- ▶ Simultaneous measurements of DAP and dose units as well as of the exposure time
- ▶ Automatic air density correction
- ▶ Usage at an extended temperature range
- ▶ Convenient installation via the DIAMENTOR RS connector box

The DIAMENTOR RS-KDK is a measuring system which fully complies with IEC / EN 60580. It features the innovative chamber-in-chamber technology, which PTW invented many years ago and allows to measure dose and dose rate as well as the dose area product and dose area product rate simultaneously during radiographic and fluoroscopic X-ray procedures.

The DIAMENTOR RS-KDK consists of an ionization chamber with integrated electronics, so it can be used as a built-in DAP solution for fixation under the X-ray tube housing or, transparent for light, it can be firmly fixed to the collimator by adaptation rails. The chamber structures are not shown on the X-ray images.

The system is available with an RS232 or RS485 interface. Alternatively, the DIAMENTOR BT Interface can be connected to the DIAMENTOR RS-KDK for wireless data transfer via Bluetooth. The DIAMENTOR RS-KDK can either be connected to a PC to read out the values or it can be used in combination with the DIAMENTOR RS-D display unit.

The DIAMENTOR RS-D display unit features a touch display. Up to two DIAMENTOR RS-KDK, version RS485, can be connected to the display unit. The measuring values are read out via RS232 or RS485. The display unit is fixed permanently close to the X-ray system and is used during the patient examination. The DIAMENTOR RS-D display unit can be used to control DIAMENTOR systems with and without PC support.

Specification

Application	patient dosimetry in diagnostic radiology according to DIN EN/IEC 60580
Measuring units	dose, dose rate, dose area product (DAP), dose area product rate, exposure time
Measuring ranges: Dose area product Digital resolution	(0.1 ... 10 ⁸) μGym ² 0.01 μGym ²
Dose area product rate Digital resolution	(0.1 ... 30 000) μGym ² /s 0.001 μGym ² /s
Entrance dose Digital resolution	(0.01 ... 30 000) mGy 0.001 mGy
Entrance dose rate Digital resolution	(0.01 ... 1 000) mGy/s 0.001 mGym/s
Exposure time Digital resolution	1 s ... 60 000 s 0.1 s
Ranges of use: Dose area product rate Tube voltage Temperature Atmospheric pressure	(0.01 ... 30 000) μGym ² /s (40 ... 150) kV (10 ... 65) °C, (50 ... 149) °F (540 ... 1060) hPa
Power supply	(12 ... 32) V DC
Outer dimensions: DIAMENTOR RS-KDK DIAMENTOR RS-D DIAMENTOR BT Interface	(183.2 x 163.2 x 17.4) mm ³ (130 x 90 x 46.5) mm ³ (20 x 45 x 90) mm ³
Weight: DIAMENTOR RS-KDK DIAMENTOR RS-D DIAMENTOR BT Interface	approx. 290 g approx. 400 g approx. 70 g

Ordering Information

T11062 DIAMENTOR RS-KDK, version RS232
T11064 DIAMENTOR RS-KDK, version RS485
T16053 DIAMENTOR RS connector box
T11063 DIAMENTOR RS-D display unit, RS232
T11065 DIAMENTOR RS-D display unit, RS485
T11063.1.010 DIAMENTOR RS-D inclined stand
L981528 DIAMENTOR BT Interface
E41750B/S/G Service contract Bronze, Silver or Gold