

R302DACS/A

DIGITAL SYSTEM FOR AUTOMATIC COLLIMATION

Multilayer, square-field, automatic collimation system. Stepper motors control the movements of shutters, additional filter if these are mounted and the round-field. A microprocessor circuit controls the stepper motors and provides the stepless adjustment of the square field dimensions at variable FFD (SID).

The two stepper motors that provide shutter control may be adjusted by two knobs or pushbuttons placed on the collimator front panel. Two boards built into the collimator allow direct control of the system via CAN-Bus.

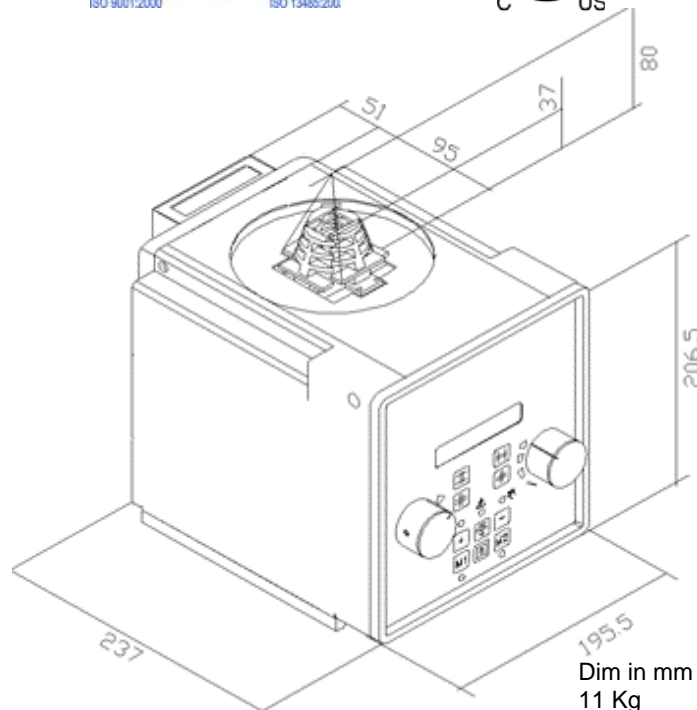
Board **ASR002** controls the square-field stepper motors for square field size setting including the movements of the additional three filters and iris in versions featuring these optional items.

The second board, **ASR001/C**, supplies the first board, the lamp which simulates the x-ray field and, supplies additional features such as laser, fan for cooling the lamp and ionization chamber if these are mounted.

If the system operates with Potter Bucky, a third board will be required: **ASR003**. This is normally located in an external metal box and receives external analogic signals.

TECHNICAL FEATURES:

- Direct control via CanBus protocol
- Possibility of operation with three Potter Buckys (a third board is required)
- LED indicators on the front panel show the mode of operation.
- A digital reading of x-ray field dimension, Focus Film Distance (SID) and, if assembled, additional filtration values and round field dimension.
- High luminosity provided by a quartz iodide lamp.
- Timer to limit lamp exposure time; time is factory set at 30 seconds thus extending lamp life and preventing overheating but may be varied with settings at 45 or 60 secs. via dip-switches on the timer board (ARSR001/C) or via CAN-Bus control.



- 150 kVp - 4 mA radiation shielding.
- Minimum inherent filtration 2 mm aluminium equivalent. (0,3mm and 1 mm on request).
- Square field: Continuous film coverage from 0 x 0 to 43 x 43 cm at 90 cm FFD ($\pm 1\%$).
- Device monitoring collimator angulation.
- Linear laser to align the collimator with the Potter Bucky.

OPTIONAL ITEMS:

- RO 257 - Interface PC board for Can Bus transmission of analogic signals to the PCB on the collimator.
- RO 258 - Additional variable filtration composed of three filters on aluminium disk, 1mm thickness - manual selection.
- RO 259 - Additional variable filtration composed of three filters on aluminium disc, 1mm thickness - automatic selection.
- RO 260 - Device (Iris) for round field collimation - automatic setting of selected field.
- RO 271 - 150 W - 24 Volts halogen lamp with cooling system.
- RO 333 - Power Led.

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