

APPLICATION

The rotating-anode X-ray tube MegaCool features a large heat capacity and a high anode cooling rate. This tube is designed for use with the Aquilion ONE™ system (TSX-301C).

FEATURES

• Large X-ray heat capacity

MegaCool achieves the large capacity of 7.5 MHU through an improved mechanism and an enlarged target. It is effective for fast scanning, where high X-ray power is required for a short time, and for multiple helical scans.

• High cooling rate

MegaCool achieves a maximum cooling rate of 1,386 kHU/min by using a new target with fins, by grounding the anode, and by using ceramics for insulation.

• High reliability

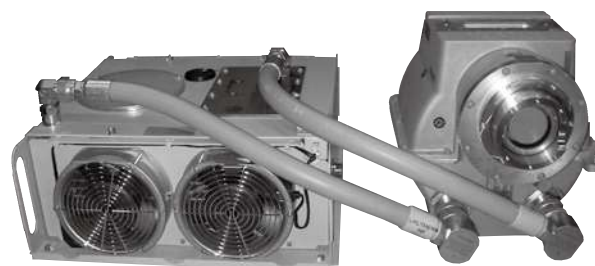
MegaCool achieves stable rotation of the target by providing a structure that supports the target on both sides.

The X-ray tube unit and the heat exchanger unit are separate units and can be replaced independently, improving reliability and servicing.

COMPOSITION

Standard composition

	CXB-750F/1A	CXB-750F/2A
• X-ray tube	1	1
• Heat exchanger	1	—
• Technical information	1	1



X-ray tube with the heat exchanger

PERFORMANCE SPECIFICATIONS

X-ray tube specifications

- Anode heat capacity: 7,500 kHU
- Max. anode cooling rate: 1,386 kHU/min (16.5 kW)
- Actual anode cooling rate: 873 kHU/min (10.4 kW)
- Electrical ratings
 - Max. tube voltage: 140 kV
 - Max. tube current: 900 mA (100kV)
- Inherent filtration of the radiation aperture: 1.0 mm Al or more
- X-ray shielding: Less than 0.88 mGy
- Focal spot size
 - IEC standard, nominal: 0.9 mm × 0.8 mm (small)
1.6 mm × 1.5 mm (large)
- Safety devices: Thermal switch, oil-flow switch, pressure relief valve

Throughput

- Max. exposure time for helical scan (large focus)
 - 120 kV/750 mA: 4 s
 - 120 kV/500 mA: 30 s
 - 120 kV/400 mA: 40 s
 - 120 kV/300 mA: 60 s
 - 120 kV/200 mA: 100 s
 - 120 kV/150 mA: 100 s

DIMENSIONS AND MASS

Unit	Dimensions W × L × H	Mass
	mm (in)	kg (lb)
X-ray tube	300 × 440 × 330	60
	(12 × 17 × 13)	(132)
Heat exchanger	485 × 485 × 260	33
	(19 × 19 × 10)	(73)

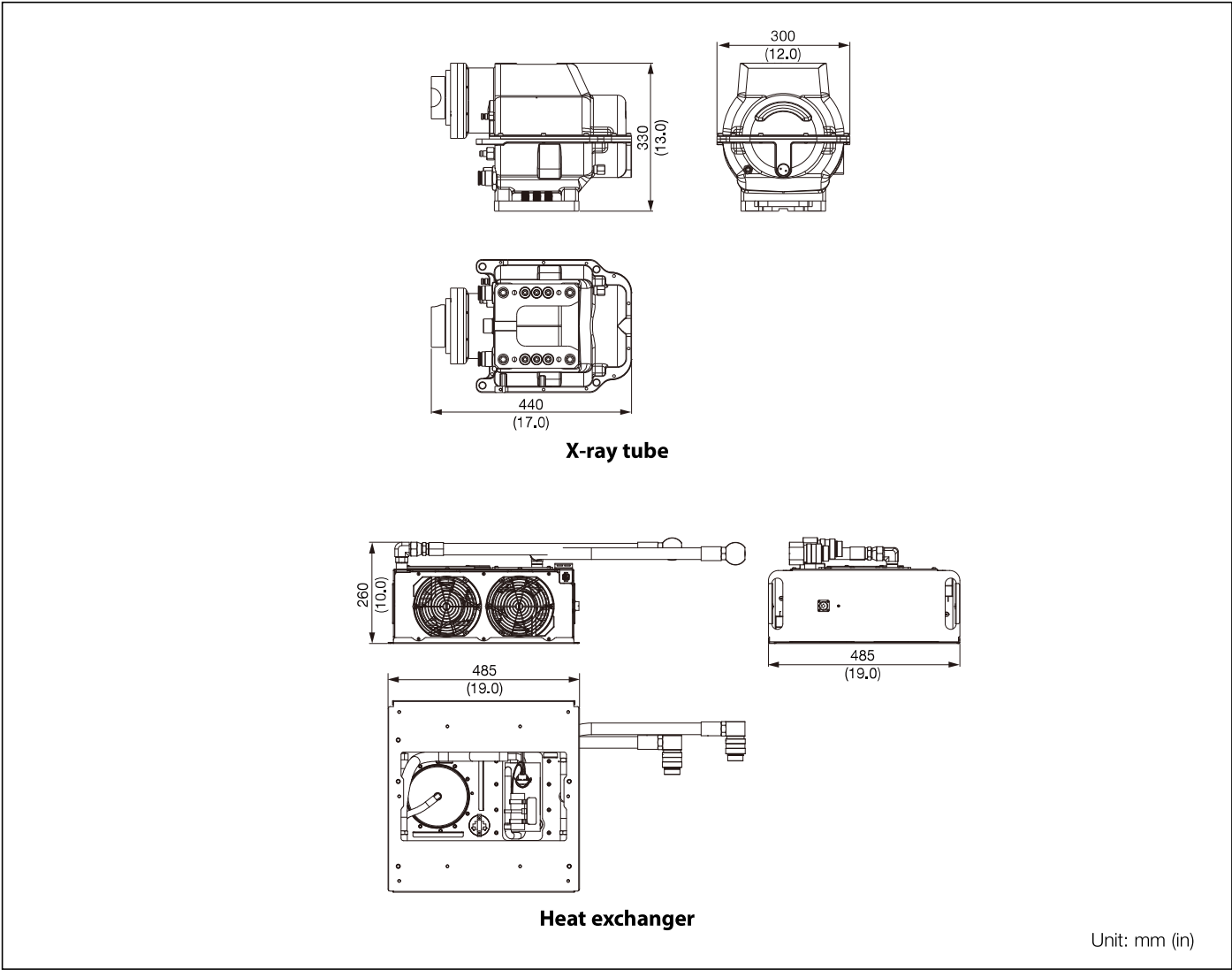
POWER REQUIREMENTS

Power is supplied from the CT system.

AMBIENT CONDITIONS

Same as those specified for the CT system.

OUTLINE DRAWING



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Canon Medical Systems Corporation meets the Environmental Management System standard ISO 14001.

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