System number: 20113041

ION 300F 600/120

High performance
Excellent technical capabilities

The ION 300F X-ray system is precise and accurate, with optimized X-ray beam geometry tailored for scanning applications. It is equipped with a high-quality metal ceramic X-ray insert ensuring accuracy and extended product lifetime. The ION 300F fan beam system is available as an air-cooled version, making it ideal for a range of climatic environments.

Easy to integrate
Compact and low-weight

The ION 300F X-ray system is compact and low-weight, with a separate tube head and control unit, and it can be mounted in any orientation, making it easy to integrate. Its alignment features ensure smooth and precise alignment with other system components, and the built-in safety setup supports easy integration into any overall system safety concept. The ION tube head and control unit modules can be exchanged without the need for specialized training, thus ensuring maximum uptime.

Speed and accuracy
Reproducibility and constant kV levels

The ION 300F X-ray system delivers speed, accuracy, and reproducibility, critical parameters for scanning applications for imaging and material discrimination. The system's temperature compensation ensures that kV levels are within the specification for the ambient temperature range. The ramp-up to maximum kV in 1 second increases overall system efficiency during cyclic operation.

comet
x-ray

Industrial control unit

CONTROL ION, the compact control unit, is highly efficient and easy to integrate. It operates with a power input voltage range of 90–264 VAC without any effect on X-ray output stability.

The advanced control unit ensures full operational control of the X-ray system, including automatic run-in procedure, X-ray control, X-ray monitoring, X-ray safety, and diagnostic handling.

Run-in is automatically calculated and intelligently managed by the control unit to ensure safe procedure for stable and reliable system performance.

High connectivity

The control unit has Ethernet, RS232, and USB communication ports for interaction with other devices via the remote interface.

The high connectivity ensures many future options, for example, preventive and predictive maintenance, by providing access to diagnostic features.

Alignment and adaption

The ION 300F tube head is easy to align thanks to the focal spot indicator, ensuring smooth and accurate positioning in relation to other system components.

The ION 300F system is flexible and adaptable, able to meet individual requirements, thus maximizing customer value.

ION 300F tube head

Weight	37 kg
Height	821 mm
Tube head housing	ø 225 mm
Focal spot size ASTM 1165	1.4 x 1.4 mm
High voltage adjustment	150 - 300 kV
High voltage steps	1 kV
kV accuracy at max kV	+/- 0.5 %
kV reproducibility	+/- 0.5 kV
mA adjustment	0.5 - 3.0 mA
mA adjustment steps	+/- 10 µA
mA accuracy	+/- 10 µA
mA reproducibility	10 µA
Max X-ray power	600 W
Beam angle	5° x 120°
Filtration	0.5 mm Ti
Leakage radiation max, 1 m	5.0 mSv/h
Environment	IP65
Temperature range	-10°C to +40°C
Cooling	Air

CONTROL ION

Weight	15 kg
Height	268 mm
Length	507 mm
Width	276 mm
AC mains	90 - 264 VAC, 45 - 65 Hz
Environment	IP40
Temperature range	-10°C to +60°C
Communication interface	RS232, USB, ETHERNET
Cooling	Air

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