

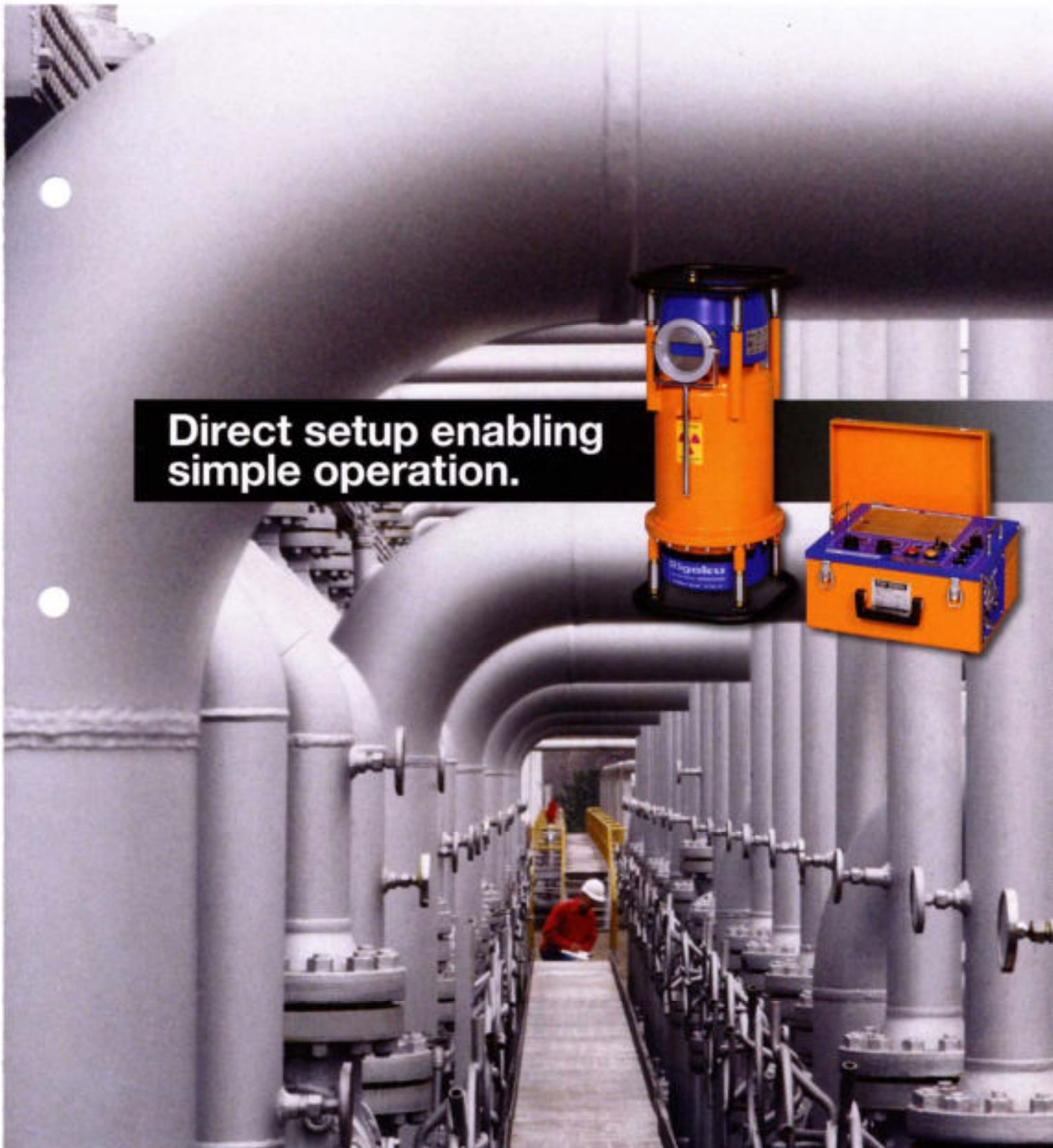
Rigaku

Radioflex

300EGM2/250EGM2/200EGM2

Portable Industrial X-ray Inspection Apparatus

**Direct setup enabling
simple operation.**



A comfortable X-ray imaging environment with er

Simple operation based on direct settings

The rotary encoder setting for X-ray Tube voltage and exposure time enables easy adjustment of optimal exposure condition. (The exposure timer can be set in units of 1 second.)

Reduced operating time with one-mode aging

Aging power is automatically adjusted depending on inspection condition. This reduces the required aging time.

Power-saving mode for low-voltage environment

New feature enabling switch from standard (STD) to power saving mode (LOW) when power generator capacity is limited.

Safe operation assured by a variety of safety functions

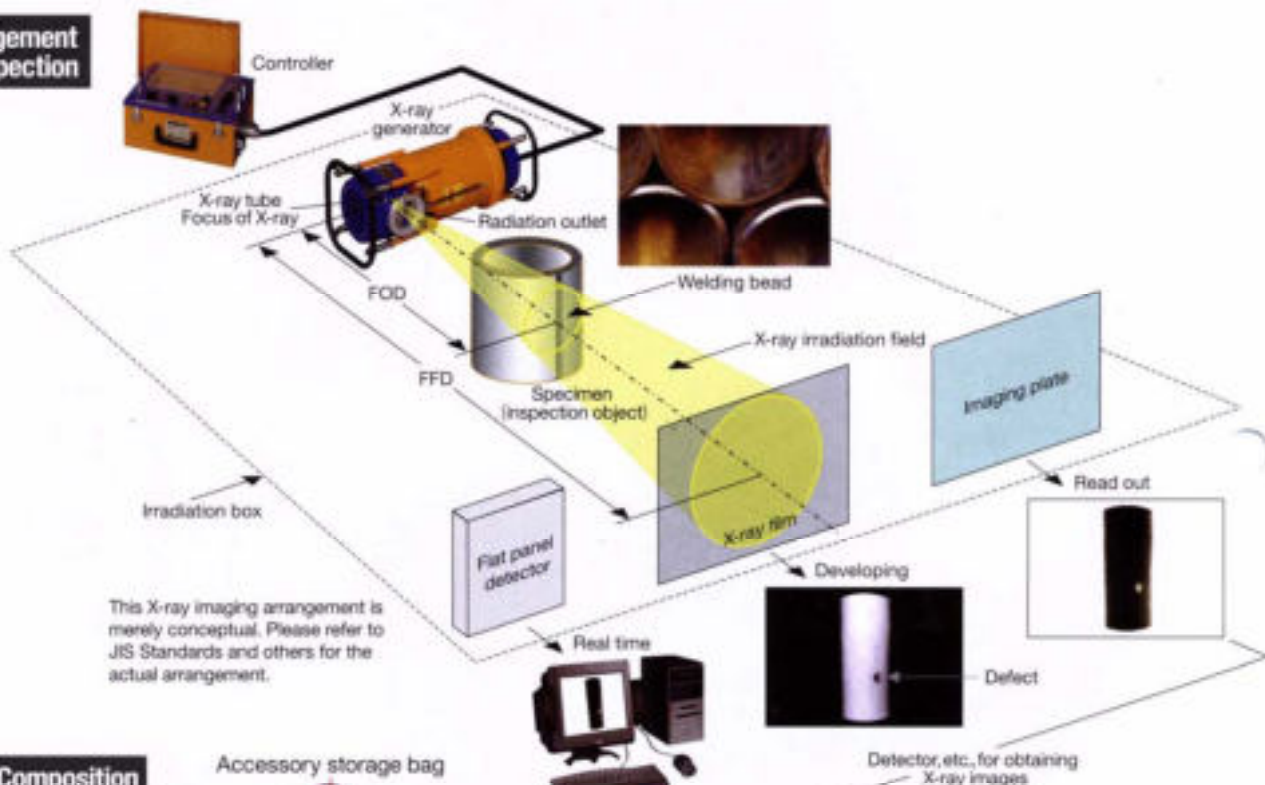
Various safety functions provide for inspection with reassurance.

- Safety key switch
- Interlock mechanism
- X-ray generation display lamp fitted on generator unit
- Buzzer alarm function

Controller Layout



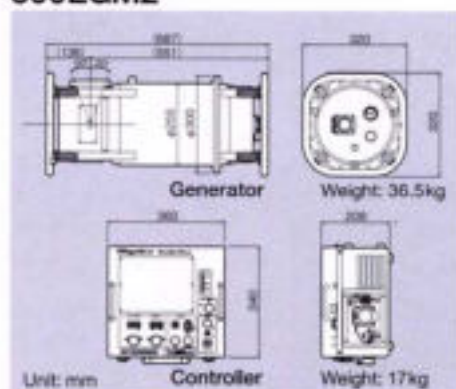
Basic Arrangement of X-Ray Inspection



Product Composition



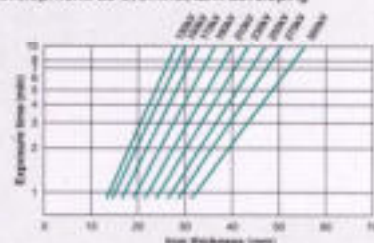
300EGM2



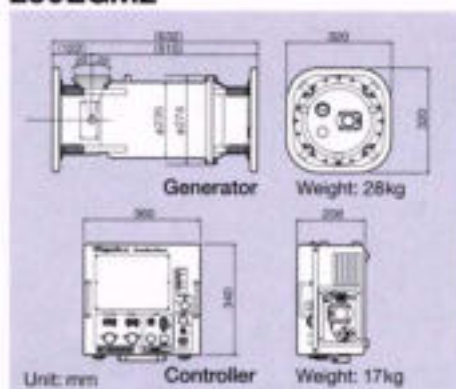
Tube voltage	130-300kV in steps of 2kV
Tube current (STD mode)	5mA (at 160kV or more)
Tube current (LOW mode)	≈4mA (at 160kV or more)
Duty cycle	50% (1:1 intermittent)
X-ray tube	Metal ceramic X-ray tube Focal spot size: 2.5×2.5mm
Inherent filter	Be 1mm+Al 2mm
Dimensions and Weight of generator	687×320×320mm 36.5kg
Dimensions and Weight of controller	360×340×208mm 17kg
Power supply	Single phase AC 190-240V 50/60Hz Power consumption (STD mode) 4.1kVA Power consumption (LOW mode) 3.0kVA

Reference exposure chart

Film: Fuji Ix100
Intensifying screen: Lead foil intensifying screen 0.03mm
Focus film distance (FFD): 600mm
Film density (D): 2.0
Development: 20°C, 5mins., tank developing



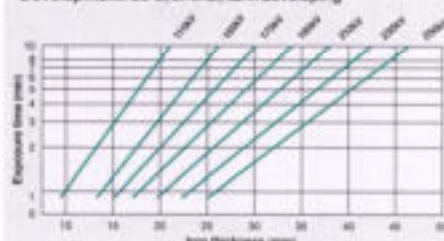
250EGM2



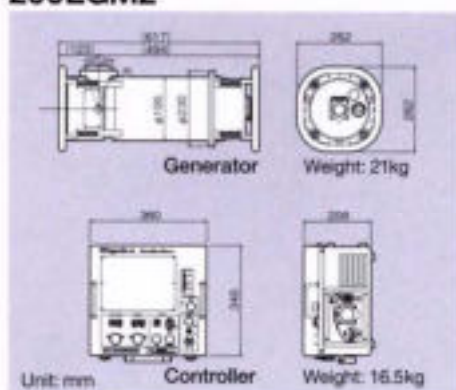
Tube voltage	110-250kV in steps of 2kV
Tube current (STD mode)	5mA (at 140kV or more)
Tube current (LOW mode)	≈4mA (at 140kV or more)
Duty cycle	50% (1:1 intermittent)
X-ray tube	Metal ceramic X-ray tube Focal spot size: 2.0×2.0mm
Inherent filter	Be 1mm+Al 2mm
Dimensions and Weight of generator	632×320×320mm 28kg
Dimensions and Weight of controller	360×340×208mm 17kg
Power supply	Single phase AC 190-240V 50/60Hz Power consumption (STD mode) 3.7kVA Power consumption (LOW mode) 2.8kVA

Reference exposure chart

Film: Fuji Ix100
Intensifying screen: Lead foil intensifying screen 0.03mm
Focus film distance (FFD): 600mm
Film density (D): 2.0
Development: 20°C, 5mins., tank developing



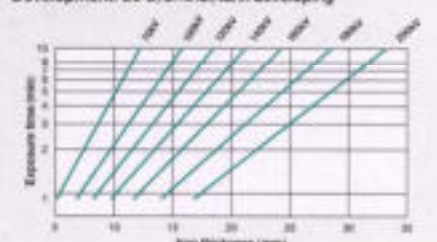
200EGM2



Tube voltage	70-200kV in steps of 2kV
Tube current (STD mode)	5mA (at 90kV or more)
Tube current (LOW mode)	≈4mA (at 90kV or more)
Duty cycle	50% (1:1 intermittent)
X-ray tube	Metal ceramic X-ray tube Focal spot size: 2.0×2.0mm
Inherent filter	Be 1mm+Al 2mm
Dimensions and Weight of generator	617×262×262mm 21kg
Dimensions and Weight of controller	360×340×208mm 16.5kg
Power supply	Single phase AC 190-240V 50/60Hz Power consumption (STD mode) 3.1kVA Power consumption (LOW mode) 2.4kVA

Reference exposure chart




Film: Fuji Ix100
Intensifying screen: Lead foil intensifying screen 0.03mm
Focus film distance (FFD): 600mm
Film density (D): 2.0
Development: 20°C, 5mins., tank developing



Main Functions/Specifications of Controller

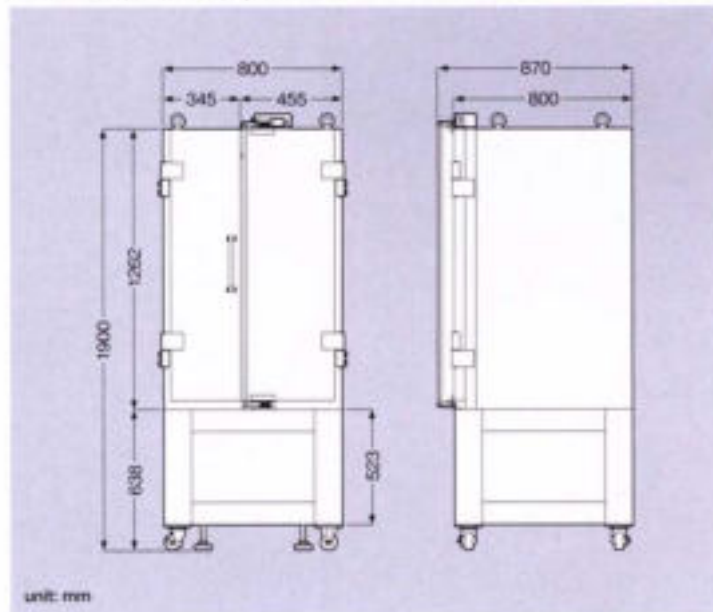
Function	Specification
Timer display (Error display)	• Digital: 1 sec. - 9 mins. 59 secs. (1-second steps) • Error code displayed when error occurs • Waiting time displayed when X-ray generation halted (optional)
Auto-aging	• Required aging time: Automatic setting for long and short half
Safety circuits	• Safety key switch • Output terminal for door interlock • Output terminal for X-ray generation warning • Pre-warning buzzer function before X-ray generation (optional)
Power saving mode	• Tube current selection switch (STD mode, LOW mode)
Others	• Time-up buzzer • Line voltage monitor • Remote controller (optional)

Application of each model

Type	Application						Guide to radiographic power using high definition film (equivalent to Fuji #100)
	Inspection of aluminum welds	Inspection of aluminum die casting	Inspection of brick and concrete	Internal radiographic inspection of other metals	Inspection of cast steel	Inspection of steel welds	
 300EGM2 Cat.No.6063A202							0-60mm
 250EGM2 Cat.No.6062A202							0-40mm
 200EGM2 Cat.No.6061A202							0-20mm

0 20 40 60mm
(iron thickness)

Irradiation box (optional)



The irradiation box is designed for safe and certain X-ray imaging, as well as saving space.

Specifications

X-ray leakage	Shield capability: 1 μ Sv/h or less
Standard features	Interlock: Safety mechanism to prevent generation of X-rays when door is open.
	Electro-magnetic lock: Safety mechanism to prevent door from being opened while X-rays are generated.
Options	Lighting inside box: Fluorescent lamp
	Casters for mobility, adjuster bolts for fixing (may not be fitted in some cases, owing to box shape, weight, etc.)
Options	Fluorescent lamp ON-OFF mechanism linked to door opening and closing.

© Size of irradiation box can be customized depending on purpose and space, etc.

Specifications subject to change without notice.

* The numeric values of performance indicated in this brochure are based on the test results at Rigaku. Rigaku does not warrant that the identical values can always be obtained regardless of different operational environments.



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