Sealed Transmissive Microfocus X-Ray Source
G-311 Series
Sealed Transmissive Microfocus X-Ray Source
G-311 Series

✓ High Brightness : 4μm resolution at 10W - 8μm resolution at 30W
✓ High Magnification : FOD 0.29mm
✓ Wide Beam angle : 168° cone
✓ Pulse Exposure : Pulse width minimum 50ms at period 10Hz

■ FEATURES
1. 110kV voltage ramp time within 1sec.
   - Quick image acquisition
2. Target maintenance free
   - No need for target rotation
   - Improving equipment operation ratio
3. Warming-up within 3 min.
   - Solution of the long waiting time at starting up X-ray equipment
   - No need for tube aging after long term storage
4. Self diagnosis of X-ray tube life time
   - Scheduled maintenance of X-ray equipment
5. 4μm resolution at 10watts
   - High throughput imaging by high magnification
6. CE and RoHS compliant
   - Applicable for overseas operation

■ SPECIFICATIONS

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<tbody>
<tr>
<td>Tube Voltage Operational Range</td>
<td>kV</td>
<td>60 – 110</td>
<td></td>
<td>40 – 110</td>
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<td>60 – 110</td>
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<tr>
<td>Tube Current Operational Range</td>
<td>μA</td>
<td>10 – 100</td>
<td></td>
<td>10 – 300</td>
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<td>30</td>
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<tr>
<td>Maximum Output</td>
<td>W</td>
<td>10</td>
<td></td>
<td>10 – 300</td>
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<td>30</td>
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<tr>
<td>Minimum Resolution</td>
<td>μm</td>
<td>4</td>
<td></td>
<td>4 – 5</td>
<td></td>
<td>4 – 8</td>
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<tr>
<td>X-ray Window Material/Thickness</td>
<td>/mm</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>C(Diamond)/0.29</td>
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<tr>
<td>Target Material</td>
<td>W</td>
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<td>W(Tungsten)</td>
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<tr>
<td>X-ray Beam Angle</td>
<td>deg.</td>
<td></td>
<td></td>
<td>168(Max.)</td>
<td>80(80%, Equidistance)</td>
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<tr>
<td>Weight</td>
<td>Kg</td>
<td></td>
<td></td>
<td></td>
<td>21</td>
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<tr>
<td>Operation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Continuous, Pulse</td>
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<tr>
<td>Pulse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Software≥1sec (Type-D)</td>
<td>Hardware≥50ms (Type-DP)</td>
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<tr>
<td>External Control</td>
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<td>RS-232C(External contact input is available with Type-DP)</td>
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<tr>
<td>Input Voltage (DC)</td>
<td>V</td>
<td>24 (+1.2, -1.2)</td>
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<td></td>
<td>65</td>
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<tr>
<td>Maximum Power Consumption</td>
<td>W</td>
<td>40</td>
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<td>Operational Ambient Temperature</td>
<td>℃</td>
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<td>10 – 45</td>
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<td>Storage Temperature</td>
<td>℃</td>
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<td>0 – 50</td>
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<tr>
<td>Operational and Storage Humidity</td>
<td>%</td>
<td></td>
<td>≤85(No Condensation)</td>
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<td>High Voltage Power Supply</td>
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<td>Built-in</td>
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MICRO CHART IMAGE (JIMA RT RC-02B)

X-RAY DOSE UNIFORMITY

TUBE CURRENT OPERATIONAL RANGE

G-311MH-D/-DP

G-311ML-D/-DP

G-311VH-D/-DP

FOCUS CHARACTERISTICS

G-311MH-D/-DP

G-311ML-D/-DP

G-311VH-D/-DP

IMAGE EXAMPLES

Bonding wire

Filp chip

BGA

Trie

※ The figures showed in each graph are typical values.
CAUTION

The X-ray sources introduced in this material generate X-rays. To be used by qualified personnel only. Safe use is the responsibility of the operator.

NOTICE

The X-ray sources introduced in this material were developed specifically for industrial use and cannot be used for food and drinks or medical applications. Since the X-ray sources introduced in this material are subject to local laws and regulations, what you are required to use may vary from region to region. Please consult with our sales representative.

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Canon ANELVA Corporation is constantly improving its products, hence specifications are subject to change without notice.

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