## RPD Product Information

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>300-655-BNC-M</td>
<td>PTW Model 30006 / 30013 - 0.6cc Waterproof Farmer Chamber</td>
</tr>
</tbody>
</table>
Description:

The 0.6 cm³ PTW Farmer ionization chamber type T30006 is a waterproof version of our standard PTW Farmer chamber, type T30001. Since the T30006 is waterproof, it may be used in water phantoms and does not require a protective sleeve. The chamber is designed for absolute dosimetry in radiation therapy. It is rugged in construction and has a PMMA/graphite thimble and an aluminum electrode.

Technical Data:

- Volume: 0.6 cm³
- Response: $2 \times 10^4$ C/Gy
- Leakage: $\pm 4 \times 10^{-6}$ A
- Polarizing voltage: max. 500 V
- Cable leakage: $10^{-12}$ C/[(Gy cm)]
- Wall material: PMMA (C₃H₆O₂), Graphite (C)
- Wall density: 1.19 gm/cm² (PMMA), 1.85 gm/cm² (C)
- Wall thickness: 0.335 mm PMMA, 0.09 mm C
- Area density: 56.5 mg/cm²
- Electrode: Aluminum, 1.1 mm Ø, 21.2 mm long
- Nominal useful range: 30 keV ... 50 MeV
- Range of temperature: 10 ... 40 °C
- Range of rel. humidity: 10 ... 80%
- Ion collection time: 300 V: 0.18 ms
- 400 V: 0.14 ms
- 500 V: 0.11 ms

- Completely Waterproof, does not require protective sleeve
- Can be safely used in water phantoms and solid state phantoms
- Open volume, vented at connector
- Fully guarded up to the measuring volume
- Touchable parts free of high voltage
- Extension cables up to 100 meters in length are available
- Suitable for all types of triaxial cable connectors: PTW-M, BNT, TNC, BNC + banana on request

<table>
<thead>
<tr>
<th>Saturation behavior</th>
<th>Polarizing Voltage</th>
<th>99.0% saturation</th>
<th>99.5% saturation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum dose rate at continuous irradiation</td>
<td>300 V</td>
<td>5.70 Gy/s</td>
<td>2.80 Gy/s</td>
</tr>
<tr>
<td></td>
<td>400 V</td>
<td>10.00 Gy/s</td>
<td>5.00 Gy/s</td>
</tr>
<tr>
<td></td>
<td>500 V</td>
<td>16.00 Gy/s</td>
<td>7.80 Gy/s</td>
</tr>
<tr>
<td>Maximum dose per irradiation pulse</td>
<td>300 V</td>
<td>0.69 mGy</td>
<td>0.34 mGy</td>
</tr>
<tr>
<td></td>
<td>400 V</td>
<td>0.91 mGy</td>
<td>0.46 mGy</td>
</tr>
<tr>
<td></td>
<td>500 V</td>
<td>1.14 mGy</td>
<td>0.57 mGy</td>
</tr>
</tbody>
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