

## HPD Series

### PCB-mount ultra compact power supply module designed for HPDs photocathodes

1 standard model

Reference:HPD5N802500

Vin : 5Vdc


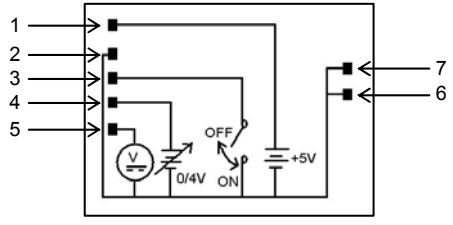
Vout : 0 to -8000V

Pout<sub>max</sub> : 400mW



- miniature
- lightweight
- PCB flat mounting
- voltage monitoring
- tight line/load regulation
- low ripple (0.02%)
- very low power consumption
- six metal walls shielding
- output current limit protection

Parameters	Specifications	Main Application																				
Vin input voltage <small>(pins 1 &amp; 2)</small>	5Vdc ±0.5Vdc (recommended) maximum : 15Vdc	<ul style="list-style-type: none"> <li>▪ Hybrid Photon Detectors (HPD)</li> </ul>																				
Vout HV output <small>(cable)</small>	adjustable from 0 to -8kV nominal, internally limited at 8.3kV																					
Polarity HV setting <small>(pin 4)</small>	fixed negative via external voltage source 0/+4V : 0V->0V, +4V->-8kV accuracy : ±0.2% at full scale input impedance = 1MΩ	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #e0ffe0;"> <th colspan="2">Package Configuration</th> </tr> </thead> <tbody> <tr> <td>Case material</td> <td>tin plate thickness 0.5mm</td> </tr> <tr> <td>Case dimensions LxHxW</td> <td>63.5 x 43 x 17.5mm</td> </tr> <tr> <td>Input / Output connections</td> <td>through section 0.63 x 0.63mm square pins, length : &gt;2mm, spacing : 2.54mm</td> </tr> <tr> <td>HV connection</td> <td>through a coaxial cable, length to be ordered</td> </tr> <tr> <td>Weight</td> <td>85g</td> </tr> <tr> <td>Insulation</td> <td>fully potted in an insulating resin</td> </tr> </tbody> </table>	Package Configuration		Case material	tin plate thickness 0.5mm	Case dimensions LxHxW	63.5 x 43 x 17.5mm	Input / Output connections	through section 0.63 x 0.63mm square pins, length : >2mm, spacing : 2.54mm	HV connection	through a coaxial cable, length to be ordered	Weight	85g	Insulation	fully potted in an insulating resin						
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Insulation	fully potted in an insulating resin																					
Nominal output current	50μA																					
Load voltage regulation	±0,01% of full output voltage for no load to full load																					
Line voltage regulation	±0,01% of full output voltage over specified input voltage range																					
Residual ripple	<2V peak-to-peak																					
Temperature coefficient	100ppm/°C																					
Output HV monitoring <small>(pin 5)</small>	DC analog 0/4V output signal : 0V->0V, -8kV->+4V accuracy : ±0.2% output impedance : 1kΩ																					
Power consumption (typical) (Vin = 5.0V)	inhibition mode : 30mW 8kV / 8μA : 300mW 8kV / 30μA : 650mW 8kV / 50μA : 850mW																					
HV power ON/OFF <small>(pin 3)</small>	<ul style="list-style-type: none"> <li>▪ ON : connect "inhibition" pin to the ground to switch on</li> <li>▪ OFF : let "inhibition" pin free to switch off</li> </ul> reaction time when switching off : 300ms with 30μA load to reach 50% of full voltage																					
Operating temperature	-10°C to +50°C																					
Storage temperature	-10°C to +70°C																					
Safeguards	<ul style="list-style-type: none"> <li>▪ 5V input protected towards polarity inversion</li> <li>▪ voltage setting is internally limited</li> <li>▪ monitoring output is protected against shortcuts</li> </ul>																					
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Marking	
 <p style="text-align: center;">TOP SIDE</p>	 <p style="text-align: center;">BOTTOM SIDE</p>

