

# FP612

## Anode/Screen & Single MCP Power Supply

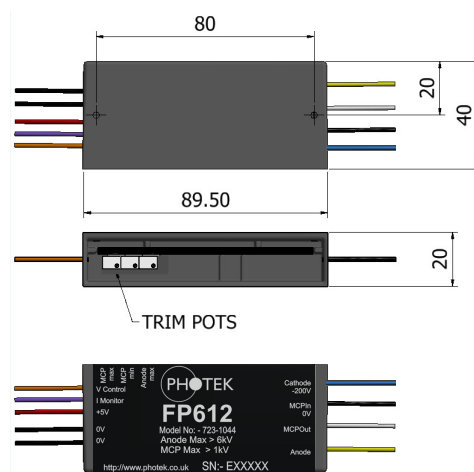
The FP612 module is a +5V input, 6000V, 1000V and -200V triple output power supply designed to supply an image intensifier tube in grounded “MCP In” mode.

This unit requires an external +5V/300mA d.c. power supply.

The MCP maximum voltage is user adjustable between 100V and 1000V with a minimum resistance of 10Mohm. The MCP maximum must be pre-set while the voltage control input is at 5V. The MCP minimum must be pre-set when the voltage control input is at 0V. MCP max must be adjusted before MCP min. The MCP Out voltage will then be remotely adjustable via the Voltage Control input between the pre-set limits.

The Anode/Screen output voltage is a nominal value between 1000V and 6000V (wrt MCPOut) and may be pre-set to any voltage within this range. The Anode/Screen floats on top of the MCP Out and tracks any voltage control adjustments made to the MCP. A maximum load current of 8uA is available with a current monitor output feature that is 0.2uA/V (i.e. 2V output  $\equiv$  0.4uA). The cathode of the FP612 is fixed at a nominal value of approximately -200V.

PSU Connections	
Inputs	
Red	+5V
Black	0V
Orange	Voltage Control
Output s	
Yellow	Screen
White	MCP Out
Black	MCP In (0V)
Blue	Cathode
Violet	I Monitor



Electrical Specifications - Inputs		Mechanical Specifications	
Supply Voltage	5V D.C. $\pm$ 5% (5.5V Absolute Maximum)	Length	90mm
Supply Current (max)	300mA	Width	40mm
Startup Current Surge	<500mA	Height	20mm
<b>Electrical Specifications - Outputs</b>		Weight	<90g
MCP O/P Voltage Max.	>1000V	<b>Operating Temperature Range</b>	
MCP Min Load	10M $\Omega$	Minimum	0°C
Anode O/P Voltage Max.	>6000V	Maximum	50°C
Anode O/P Current Max.	1uA	<b>Wire Specifications</b>	
Cathode O/P Voltage Max.	-220V	Teledyne Reynolds Micro-Flex	18kV
Cathode Impedance	2G $\Omega$	Wire Length ( PTFE awg28)	>200mm

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Photek reserves the right to amend general information contained in this manual without prior notice.

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