

# FP610

## Anode/Screen & Single MCP Power Supply

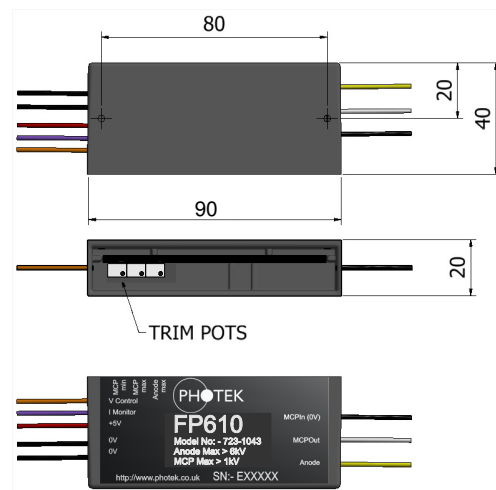
The FP610 module is a +5V input, 6000V and 1000V dual output power supply designed to supply an image intensifier tube in grounded “MCP In” mode. This unit would normally be used in conjunction with a cathode gate module such as Photeks GM10-50 or GM300-3.

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

The MCP voltage is a nominal value between 300V and 1200V which is user adjustable 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 these two 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 MCPOut and tracks any voltage control adjustments made to the MCP. A maximum load current of 1uA is available with a current monitor (IMonitor) output feature that is 0.2uA/V (i.e. 2V output  $\equiv$  0.4uA).

PSU Connections	
Inputs	
Red	+5V
Black	0V
Orange	Voltage Control
Output s	
Yellow	Screen
White	MCPOut
Black	MCPIn
Violet	IMonitor



Electrical Specifications		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
O/P Voltage Max.	>1000V	Weight	$\approx$ 90g
O/P Voltage Max.	>6000V	Fixings (Nylon Screws Supplied)	M3
Output Current Max.	1uA	Operating Temperature Range	
Wire Specifications		Minimum	0°C
Wire Length ( PTFE awg28)	>200mm	Maximum	50°C
Teledyne Reynolds Micro-Flex	18kV		

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Any unauthorised adjustment or modification to this unit will void all warranties and will only be supported at Photeks discretion.

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

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