

# FP632

## Anode/Screen & Triple MCP Power Supply

The FP632 module is a +5V input, 6000V, 2800V and -200V triple output power supply designed to supply an image intensifier tube in grounded “MCP In” mode.

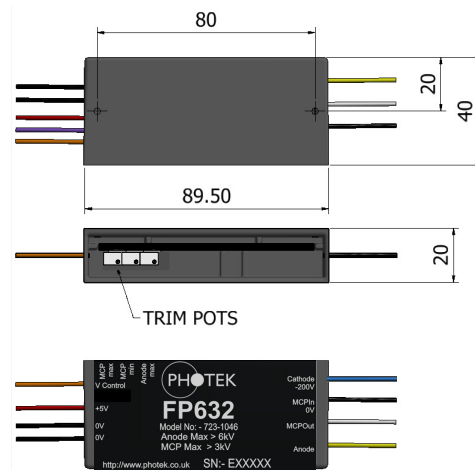
This unit requires an external +5V/300mA d.c. power supply.

The MCP maximum and minimum voltages are user adjustable between 100V and 2800V with a minimum resistance of 50Mohm. 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 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.

The cathode of the FP632 is fixed at a nominal value of -200V.

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



| Electrical Specifications - Inputs  |  |
|-------------------------------------|--|
| Supply Voltage                      | 5V D.C. ±5%<br>(5.5V Absolute Maximum) |
| Supply Current (max)                | 300mA                                  |
| Startup Current Surge               | <500mA                                 |
| Electrical Specifications - Outputs |  |
| MCP O/P Voltage Max.                | >2800V                                 |
| MCP Min Load                        | 50MΩ                                   |
| Anode O/P Voltage Max.              | >6000V                                 |
| Anode O/P Current Max.              | 1uA                                    |
| Cathode O/P Voltage Max.            | -220V                                  |
| Cathode Impedance                   | 2GΩ                                    |

| Mechanical Specifications    |        |
|------------------------------|--------|
| Length                       | 90mm   |
| Width                        | 40mm   |
| Height                       | 20mm   |
| Weight                       | <90g   |
| Operating Temperature Range  |        |
| Minimum                      | 0°C    |
| Maximum                      | 50°C   |
| Wire Specifications          |        |
| Teledyne Reynolds Micro-Flex | 18kV   |
| Wire Length ( PTFE awg28)    | >200mm |

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