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Data Sheet

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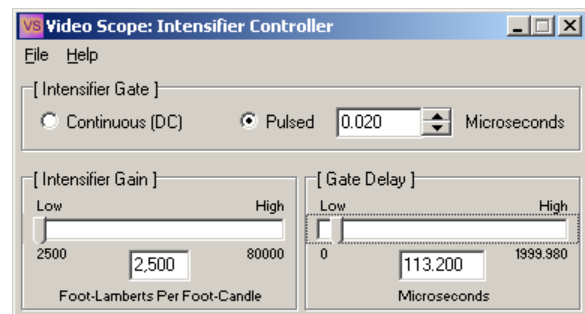
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VS4-1845

Generation III Image Intensifier Assembly



2 lens designs for all camera types,
including cooled sensors



Now Computer Controlled

Applications Include:

- ✓ Microscopy-Fluorescence, Single Molecule
- ✓ Astronomy
- ✓ Combustion Research
- ✓ Bioluminescence
- ✓ Other Scientific Low Light Level Imaging

Features:

- ✓ Gen III High Resolution Intensifier
- ✓ 64 Linepairs/mm Resolution
- ✓ Over 80,000 Luminous Gain
- ✓ 1/2", 2/3", or 1" Camera Format
- ✓ Negligible Shading and Distortion
- ✓ 'C' Lens Mount In and Out
- ✓ Computer Control of Gain and Gate Functions
- ✓ Long Life

The **VS4-1845** is a high resolution high gain Generation III Microchannel Plate (MCP) Image Intensifier optically coupled using a high efficiency lens for use in very low light quantitative imaging. The **VS4-1845** is coupled to a Digital or Analog video camera via a C-Mount lens output. F-Mount output is available as an option. The output format is fixed for either a 1/2", 2/3" or 1" camera format. The use of the special Generation III Image Intensifier in the **VS4-1845** results in quantum efficiency three times over other intensifiers in the visible spectrum.

The **VS4-1845** is designed for use in applications where input to output intensity linearity is required for rigorous quantification of input intensity. Over-exposure protection is included.

The **VS4-1845** is pre-adjusted for maximum gain and calibrated for use with a Windows™ operated control. A GUI allows the user to adjust the Gain, Gate and Gate Delay. The **VS4-1845** comes complete with instruction manual, intensifier control software (for Windows™), cables, and power supply ready to operate. Just install the software on a computer and connect the **VS4-1845** and it is ready to operate.

Specifications:

- Type: **Generation III MCP Image Intensifier**
- Input Window: **Glass**
- Active Area: **18 mm**
- Photocathode: **GaAs**
- Response: **Standard – 450 to 900nm**
UV (Gen II) – 200 to 700nm
Extended Blue – 350 to 900nm
- Output Window: **Fiber Optic**
- Phosphor: **P- 43**
- Peak Output: **560 nm**
- Gain Range: **2,500 to 80,000 FL/FC**
- Gating Range: **50ns to 1ms (in 20ns increments)**
- Gating Delay Range: **0ns to 2ms (in 20ns increments)**
- Resolution: **64 linepairs/mm**
- Output Format: **8mm for ½” camera**
11mm for ⅔” camera
16mm for 1” camera
- Geometric Distortion: **<1%**
- Shading: **<10%**
- Control: **Via Computer (RS-232) with Windows™ Operating System**
- Life: **10,000 hours**

Mechanical:

- Dimensions: **90 x 73 x 99 mm**
- Weight: **3 lbs**
- Input Lens Mount: **C-Mount**
- Camera Mount: **C-Mount**

Electrical:

- Input Voltage: **12VDC (AC/DC Adapter included)**
- Input Power: **<10 Watts**

