

Model 560 Specifications (for reference only)

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| PHYSICAL DIMENSIONS | Optical Head (w/o Purge Shutter) | 17"(L) X 9-1/4"(W) X 15"(H)(43.2x23.5x38.1 CM) |
| | Optical Head (with Purge Shutter) | 22"(L) X 9-1/4"(W) X 15"(H)(55.9x23.5x38.1 CM) |
| | Retro Assembly (w/o Purge Shutter) | 10"(L) X 7" (Diameter)(25.4x17.8 CM) |
| | Retro Assembly (with Purge Shutter) | 15"(L) X 7" (Diameter)(38.1x17.8 CM) |
| | Single Purge Blower Assembly | 22-1/4"(L) X 20"(W) X 33"(H)(56.5x50.8x83.8 CM) |
| | Dual Purge Blower Assembly | 2 assemblies with Single Purge Blower dimensions |
| | Enhanced Remote Panel ** | 3U 19" Rack Mount 5-1/4"(H) X 9" Depth 48.3(W)x13.3(H)x22.9(D) CM |

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| OPTICAL CHARACTERISTICS | Optical Measurement Technique | Double Pass Extinction |
| | Angle of View | Less than 4 degrees |
| | Angle of Projection | Less than 4 degrees |
| | Spectral Response | Peak: 500 to 600 nm Mean: 500 to 600 nm 94% of Energy: 500 to 600 nm |

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| * SYSTEM MEASUREMENT CHARACTERISTICS | Response Time (To 95% of change) | Less than 10 seconds |
| | Calibration Zero Operation | On command |
| | Upscale Calibration Operation | On command |
| | Calibration Error (Mean Error + Confidence Coefficient) | 2.0% Opacity Maximum |
| | Long Term (60 Day) Drift | Zero: 0.5% Opacity Maximum Span: 0.5% Opacity Maximum |
| | Stability Over Operating Temperature Range | ±2.0% Opacity Maximum per 40°F change in temperature (as per ASTM D6216) |
| | Stability Over Operating Mains Voltage Range | ±1.0% Opacity Maximum (as per ASTM D6216) |
| | Mean Time Between Failure | 8300 Hours (Estimated) |

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| POWER REQUIREMENTS | Optical Head | 85-245 VAC, 47-63Hz, Single Phase, 30 VA Max. |
| | Single Purge Blower System | 115VAC/230VAC, 60/50 Hz, Single Phase, 414 VA Max. |
| | Dual Purge Blower System | Two circuits, each with same requirements as Single Purge Blower |
| | Enhanced Remote Panel ** | 85-245 VAC, 47-63Hz, Single Phase, 30 VA Max. |

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| AMBIENT OPERATING CONDITIONS | Optical Head | Temperature Range: -4 to +140°F (startup) -25 to +140°F (operating) Relative Humidity Range: 0 to 100% condensing |
| | Enhanced Remote Panel ** | Temperature Range: +32 to +104°F Relative Humidity Range: 0-95% noncondensing |

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| MEASUREMENT MEDIUM CONDITIONS | Static Pressure Range | Single Purge Blower: -15.0 to +5.0 inches H2O Gauge Dual Purge Blower: -15.0 to +15.0 inches H2O Gauge >+15inches H2O consult factory. |
| | Gas Composition | not critical |
| | Humidity | must be noncondensing for valid measurement |
| | Maximum Temperature | +500°F (without High Temperature Option) +1500°F (with High Temperature Option) Consult factory for higher temperature operation |

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| OPTICAL HEAD HMI CHARACTERISTICS | Display Type | Six 7 Segment LED's |
| | Indicating LED's | Fault, Set, In Cal, Power |
| | User Input Controls | 10-key keypad |

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| ** ENHANCED REMOTE PANEL HMI CHARACTERISTICS | Display Type | Graphics mode liquid crystal with LED backlight |
| | Display Resolution | 240 X 128 |
| | Indicating LED's | Fault, Alarm, Power |
| | User Input Controls | 20-key keypad, security keyswitch |

**** MULTI I/O
BOARD
CHARACTERISTICS**

| ANALOG OUTPUTS | |
|----------------|--|
| Number | 4 |
| Isolation Type | Optical & capacitive barriers; channel to channel, channel to circuit common & earth |
| DIGITAL INPUTS | |
| Number | 8 |
| Modes | Isolated (5VDC-24VDC user supplied) and Non-isolated (Dry contact) |
| RELAY OUTPUTS | |
| Number & Type | 8 SPST, N.O. (Single Pole Single Throw, Normally Open) |

* Measurement based on single pass response with a PLCF of 1.00.

** Does not apply to Direct Interface version.

Model 560DI Specifications (for reference only) (Direct Interface)

**PHYSICAL
DIMENSIONS**

| | |
|--------------------------------------|--|
| Optical Head (w/o Purge Shutter) | 17"(L) X 9-1/4"(W) X 15"(H)(43.2x23.5x38.1 CM) |
| Optical Head (with Purge Shutter) * | 22"(L) X 9-1/4"(W) X 15"(H)(55.9x23.5x38.1 CM) |
| Retro Assembly (w/o Purge Shutter) | 10"(L) X 7" (Diameter)(25.4 x 17.8 CM) |
| Retro Assembly (with Purge Shutter)* | 15"(L) X 7" (Diameter)(38.1 x 17.8 CM) |
| Single Purge Blower Assembly | 22-1/4"(L) X 20"(W) X 33"(H)(56.5x50.8x83.8 CM) |
| Dual Purge Blower Assembly * | 2 assemblies with Single Purge Blower dimensions |

**OPTICAL
CHARACTERISTICS**

| | |
|-------------------------------|--|
| Optical Measurement Technique | Double Pass Extinction |
| Angle of View | Less than 4 degrees |
| Angle of Projection | Less than 4 degrees |
| Spectral Response | Peak: 500 to 600 nm Mean: 500 to 600 nm 94% of Energy: 500 to 600 nm |

**** SYSTEM
MEASUREMENT
CHARACTERISTICS**

| | |
|--|--|
| Response Time (To 95% of change) | Less than 10 seconds |
| Calibration Zero Operation | On command |
| Upscale Calibration Operation | On command |
| Calibration Error (Mean Error + Confidence Coefficient) | 2.0% Opacity Maximum |
| Long Term (60 Day) Drift | Zero: 0.5% Opacity Maximum Span: 0.5% Opacity Maximum |
| Stability Over Operating Temperature Range | ±2.0% Opacity Maximum per 40°F change in temperature (as per ASTM D6216) |
| Stability Over Operating Mains Voltage Range | ±1.0% Opacity Maximum (as per ASTM D6216) |
| Mean Time Between Failure | 8300 Hours (Estimated) |

**POWER
REQUIREMENTS**

| | |
|----------------------------|--|
| Optical Head | 85-245 VAC, 47-63Hz, Single Phase, 30 VA Max. |
| Single Purge Blower System | 115VAC/230VAC, 60/50 Hz, Single Phase, 414 VA Max. |
| Dual Purge Blower System * | Two circuits, each with same requirements as Single Purge Blower |

**AMBIENT
OPERATING
CONDITIONS**

| | |
|--------------|---|
| Optical Head | Temperature Range: -4 to +140°F (startup) -25 to +140°F (operating) Relative Humidity Range: 0 to 100% condensing |
|--------------|---|

MEASUREMENT

| | |
|---------------------------|---|
| Static Pressure Range *** | Single Purge Blower: -15.0 to +5.0 inches H2O Gauge Dual Purge Blower: -15.0 to +15.0 inches H2O Gauge >+15inches H2O consult factory |
|---------------------------|---|

**MEDIUM
CONDITIONS**

| | |
|-------------------------|--|
| Gas Composition | not critical |
| Humidity | must be noncondensing for valid measurement |
| Maximum Temperature *** | +500°F (without High Temperature Option) +1500°F (with High Temperature Option) Consult factory for higher temperature operation |

| | | |
|-----------------|--------------------------------|--|
| OPTICAL HEAD | Display Type | <i>Six 7 Segment LED's</i> |
| HMI | Indicating LED's | <i>Fault, Set, In Cal, Power</i> |
| CHARACTERISTICS | User Input Controls | <i>10-key keypad</i> |
| SIX POINT I/O | ANALOG OUTPUTS | |
| BOARD | Number | <i>2</i> |
| CHARACTERISTICS | Output Type | <i>4-20mA with live 4mA zero, OR 0-20mA w/o live zero</i> |
| | Maximum Load Resistance | <i>900 ohms</i> |
| | Isolation Type | <i>Optical & capacitive barriers; channel to channel, channel to circuit common & earth</i> |
| | DIGITAL INPUTS | |
| | Number | <i>2</i> |
| | Modes | <i>Isolated (5VDC-24VDC user supplied) and Non-isolated (Dry contact)</i> |
| | RELAY OUTPUTS | |
| | Number & Type | <i>2 SPST, N.O. OR N.C. (Single Pole Single Throw, Normally Open OR Normally Closed [jumper selectable])</i> |

* Optional equipment.

** Measurement based on single pass response with a PLCF of 1.00.

*** Specification applies only to systems with Purge Blowers.