



IRIS Systems Inc.  
 7583 Vantage Place, Delta, BC. V4G 1A5  
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## PRODUCT DATA SHEET: MODEL 700 DC, 700 AC



### Product description:

The IRIS Model 700DC and Model 700AC are single-channel flame monitoring systems when combined with an IR or UV viewing head from either the 7xx or 8xx series.

The Model 700 system is fail-safe and designed for ease of setup and use and for high reliability. The signal processor snaps onto a standard 35mm DIN rail. All connections are made through high quality Phoenix plug-in connectors. The signal processor can be readily removed simply by unplugging three plugs and releasing it from the DIN rail.

The labels for the keys on the keypad of the signal processor assist in setting up the system. A two-digit numeric display and four LED status indicators make the system easy to use. There are also two LED's in the connector at the viewing head which help with aligning the viewing head and with troubleshooting.

### SPECIFICATIONS

<b>ELECTRICAL: Model 700 AC</b>	Primary Input Power	85-265VAC, 50-60 HZ, 0.07A MAX. fused (with either Viewing Head connected)
	Battery Backup Voltage	22VDC to 26VDC, 0.2A DC MAX. fused (with either Viewing Head connected)

<b>ELECTRICAL: Model 700 DC</b>	Primary Input Power	22VDC to 26VDC, 250 mA MAX, fused (with either Viewing Head connected)
	Battery Backup Voltage	22VDC to Input Voltage -.5VDC, fused (with either Viewing Head connected)

<b>ENVIRONMENTAL</b>	Ambient Temperature	(32°F to 140°F) 0°C to 60°C
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<b>OUTPUTS</b>	Flame Relay	2 Form C Contact
	Self Checking Relay	1 Form C Contact
	Relay Contact Ratings	5A at 125 VAC, 277 VAC, & 30 VDC; 1/8 HP 125 & 250 VAC
	Analog Flame Signal	isolated 0 to 20 mA or 4 to 20 mA output for remote meters or DCS, 360 ohms maximum resistance

<b>WEIGHT</b>	Shipping Weight	2 lbs (0.9 Kg.)
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<b>DIMENSIONS</b>	Single Unit Carton	9 x 7 x 6 ½ inches
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<b>APPROVALS and CERTIFICATIONS</b>	<p>The Model 700 signal processors and Models S702, S702-HF, S702-PF, S702-HF-PF, S706, S706-PF, S802, S802-HF, and S806 viewing heads have Factory Mutual (FM) Approval for Combustion Safety and Canadian Standards Association (CSA) Certification with added National Recognized Testing Laboratories (NRTL/C) Certification.</p> <p>As well, the above viewing heads are approved and certified by Factory Mutual and CSA for use in hazardous locations, Class I, Division 2, Groups A, B, C and D, temperature code T4A. The viewing heads are approved as sealed and corrosion resistant to NEMA 4 and NEMA 4X by Factory Mutual.</p>	
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## PRODUCT DATA SHEET: MODELS 700 and 800 Viewing Heads



Model 700



Model 700 PF



Model 800

**Product description:**

The IRIS Models S7xx and S8xx series of viewing heads are compact cylindrical units that are easily detachable from their Delrin mountings.

A 1/2 inch NPT female pipe thread is provided on the mounting for attaching a swivel mount or sight pipe. Provision for purge air is by means of a 1/4 inch female pipe thread on the side of the mounting. A continuous flow of purge air is required for cooling.

A transparent Hirshmann connector with two LED's and 15 ft. length of four conductor shielded cable is provided as standard is provided with all viewing heads, except for the -PF model. The LED's assist in set-up and self checking of the viewing head.

Accommodation is provided for an orifice and snap ring in the mounting block.

### SPECIFICATIONS

<b>ELECTRICAL</b>	Input Power	22VDC to 26VDC, 150 mA MAX from Signal Processor
<b>ENVIRONMENTAL</b>	Viewing Head Sealing	NEMA TYPE 4/4X with tightened connector and UV cable protection
	Ambient Temperature	-40°F to 185°F (-40°C to 85°C)
<b>IR DETECTOR SPEC (S702, S702-PF, S702-HF, S702-HF-PF, S802, S802-PF)</b>	Detector type	InGaAs photodiode with spectral response 950 to 1710nm (1/2 intensity points)
	High Pass Filter Pickup	33 Hz standard, 155 Hz High Freq. option (-HF)
	OPTICAL: Angle of view	1 degree (1.45" dia. at 6 ft.)
<b>UV DETECTOR SPEC (S706 &amp; S706-PF, S806)</b>	Detector Type	UVtron with spectral response 185 to 260nm
	OPTICAL: Angle of view	5 degrees (1 inch per foot)
<b>CABLE &amp; CONNECTOR</b>	Signal Processor to Viewing Head	IRIS C-330, 4 Conductor, 18 ga., shielded, 90C, Sunlight Resistant, 15 ft. long, with ITC rating for US and CIC rating for Canada.
	-PF model or when extending standard cable	4 conductor, 22 ga. or larger with overall braided shield, 95% coverage, or with shield over the signal line.
<b>WEIGHT</b>	Shipping Weight	2 lbs. (0.9 Kg.)
<b>DIMENSIONS</b>	Single Unit Carton	9 x 7 x 6 1/2 inches

<b>APPROVALS and CERTIFICATIONS</b>	Models S702, S702-HF, S702-PF, S702-HF-PF, S706, S706-PF, S802, S802-HF, and S806 viewing heads have Factory Mutual (FM) Approval for Combustion Safety and Canadian Standards Association (CSA) Certification with added National Recognized Testing Laboratories (NRTL/C) Certification. As well, the above viewing heads are approved and certified by Factory Mutual and CSA for use in hazardous locations, Class I, Division 2, Groups A, B, C and D, temperature code T4A. The viewing heads are approved as sealed and corrosion resistant to NEMA 4 and NEMA 4X by Factory Mutual.
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