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PRODUCT DATA SHEET: MODEL P522DC, MODEL P522AC



Product Description:

The IRIS Model P522 is a state of the art flame signal processor. It is designed to be used with the IRIS S5xx, S55x and S55xB series of Viewing Heads.

The IRIS Model P522 shares the same electrical specifications as the IRIS Model P520, however, it is a panel mounted device, whereas the Model P520 is rack mounted. Removable wiring connectors are provided to facilitate installation, and provide ease of removal of the unit if required.

In addition to the four LED's on the front panel, a digital readout and bar graph provide constant and concise information on the system status.

The front panel also provides a number of controls for setting up and operation of this microprocessor based flame monitoring signal processor.

SPECIFICATIONS		
	P522 DC Input Power	22 – 26 VDC, 130mA plus 100mA for each Viewing Head
ELECTRICAL	P522 AC Input Power	85 – 264 VAC, 47 – 440 Hz, 0.3A Max.
LLEOTRICAL	Battery Power (Battery V < Main V)	22 – 26 VDC, 130mA plus 100mA for each Viewing Head
	Power to Viewing Head	+26 VDC, fused @ 0.25A
ENVIRONMENTAL	Ambient Temperature	0°C to 52°C (32°F to 125°F)
CABLE	Signal Processor to V.H.	4 conductor, #18AWG one wire with braided shield (IRIS C328)
	Flame Relay	2 form C contacts
	Self-Checking Relay	1 form C contacts
OUTPUTS	Relay Contact Ratings	5A at 30VDC, 125VAC and 277VAC
	Analog Flame Signal	0-19.8mA or 4-19.8mA 360 ohms max resistance
	Power to Viewing Head	Fused with self-resetting fuses at 0.25A
INPUTS	Channel Select (Isolated Input Req. 2 wires)	Vin 7.5-30 VDC range (Input R=3900 Ohms) 26 VDC, 6.4mA 10 VDC, 2.3mA
	Flame Signal from Viewing Head	Vin 7.5-30 VDC range (Input R=3900 Ohms) 13.6 VDC, 3.2mA
SERIAL COMMUNICATION	RS-422 (Differential) 4800 or 9600 baud	Input/Output circuits photo coupler isolated from P522 power supplies and ground. Baud rate selectable from front panel of P520
WEIGHT	Shipping Weight	2 lbs (0.9Kg)
DIMENSIONS	Single unit Carton	7¾ x 7¼ x 4¾ inches
APPROVALS	The IRIS Model P522 Signal Processo Association) certification.	r has FM (Factory Mutual) approval and CSA (Canadian Standards
For further information	on this product, visit our website at www.i	iris-systems.com Rev07/05

IRIS MODEL P522 APPLICATION MANUAL ADDENDUM 2A

CHANGES FOR P522AC SIGNAL PROCESSOR The P522AC is an upgrade to the P522 Signal Processor. It features universal AC input power, a higher current rating for the relay contacts, a +24V OUT terminal to power the SEL inputs, and compatibility with all S5XX viewing heads. All the user features of the earlier P522 are maintained plus the self-resetting fuses, front panel lettering and the source impedance

P522AC SPECIFICATIONS

resistor requirement of Addendum 1.

ELECTRICAL	
Main Power -	85-264 VAC, 47-440Hz,
Battery Power -	0.3A MAXIMIM 22-24 VDC, 130mA plus 100mA/View Head
ENVIRONMENTAL	
Ambient Temp	0°C to 52°C CSA Rating 0°C to 60°C FM Rating
OUTPUTS	
Flame Relay -	2 Form C Contacts
0 5	1 Form C Contact
Contact Ratings -	5A @ 30VDC, 125VAC and 277VAC
Analog Signal -	0-19.8mA or 4-19.8mA 360 ohms max. resistance
Power to View Heads -	fused with self-resetting fuses at 0.25A
+24VDC OUT -	50mA MAXIMUM
INPUTS	
Isolated Chan. Select -	7.5 - 30 VDC Input R = 3900 ohms
Coil for V.H. Select -	17-48 VDC (24 VDC nom)

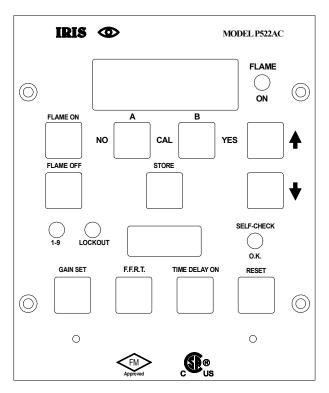
SERIAL COMM.

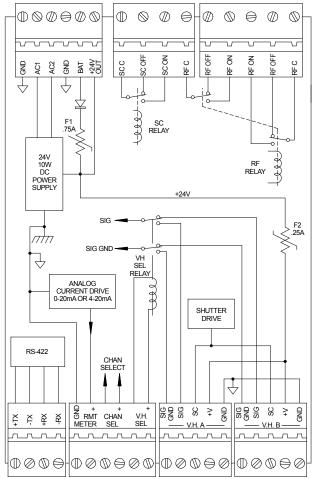
RS-422 baud rate	-	4800 to 38400, user selected
Cable	-	Two twisted pairs

VIEWING HEAD CABLE: When using S5XX view heads in ordinary locations, use IRIS C-328 cable or another cable running in a metal conduit to the control room or signal processor enclosure, or use IRIS C-330 cable or a shielded cable with UL ITC and CSA CIC (C22.2 No. 239) ratings without conduit. When using S55X viewing heads in hazardous locations the above cabling specifications also apply, except that if conduit is used, it must be sealed at both ends.

Contact information:

Sales and Applications:	Factory and Repairs:
IRIS Systems Inc.	JB Systems, Inc. 4944 113 th Ave. N
#7583 Vantage Place	4944 113 th Ave. N
Delta, B.C. Canada	Largo, FL 33760
V4G 1A5	Ph: 727-545-3900
Ph: 800-667-IRIS	Fax: 727-547-9589
Ph: 604-584-4747	





IRIS MODEL P522 APPLICATION MANUAL ADDENDUM 2B **CHANGES FOR P522DC SIGNAL PROCESSOR** The P522DC is an upgrade of the P522 Signal Processor. It features a higher current rating for the relay contacts and is compatible with all S5XX viewing heads. The front panel and the internal connections are shown on the right. All the user features of the earlier P522 are maintained plus the self-resetting fuses, front panel lettering and the source impedance resistor requirement of Addendum 1.

P522DC SPECIFICATIONS

ELECTRICAL

Main Power -	22-26 VDC, 130mA
	plus 100mA/View Head
Battery Power -	22-26 VDC, 130mA
(Battery V < Main V)	plus 100mA/View Head
ENVIRONMENTAL	

Ambient Temp.

OUTPUTS

Flame Relay	
Self-Checking Relay	
Contact Ratings	

Analog Signal

Power to View Heads -

INPUTS

Isolated Chan. Select -

Coil for V.H. Select -

SERIAL COMM.

RS-422 baud rate	-	4800 to 38400 user selected
Cable	-	Two twisted pairs

VIEWING HEAD CABLE: When using S5XX view heads in ordinary locations, use IRIS C-328 cable or another cable running in a metal conduit to the control room or signal processor enclosure, or use IRIS C-330 cable or a shielded cable with UL ITC and CSA CIC (C22.2 No. 239) ratings without conduit. When using S55X viewing heads in hazardous locations, the above cabling specifications also apply, except that if conduit is used, it must be sealed at both ends.

Contact information:

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IRIS Systems Inc.
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Factory and Repairs: JB Systems, Inc. 4944 113th Ave. N Largo, FL 33760 Ph: 727-545-3900 Fax: 727-547-9589

 0° C to 52° C CSA Rating 0° C to 60° C FM Rating

5A @ 30VDC, 125VAC

0-19.8mA or 4-19.8mA

360 ohms max. resistance

fused with self-resetting

2 Form C Contacts

1 Form C Contact

and 277VAC

fuses at 0.25A

Input R = 3900 ohms 17-48 VDC (24 VDC nom)

7.5-30 VDC

