

SPECIFICATIONS

ELECTRICAL

- 24VDC +/- 10%, 300mA with 1 S550 VH.

ENVIRONMENTAL

Ambient Temperature
Case Temperature

- Viewing Heads NEMA TYPE 4
- S550, S552, S556 VH. 0°C to +80°C
- S550, S552, S556 VH. 0°C to +60°C
- S580 VH. -54°C to +300°C

OPTICAL

- IR 1.0°
- UV 3.0°

CABLE (Between Viewing Head and Signal Processor)

- 4 conductor, #16AWG or #18AWG.
one wire shielded with braided shield for flame signal.

IR FLICKER IR HIGH PASS FILTERS

| S511 & S512 | | S550 | |
|-------------|--------|------|--------|
| LL | 36 Hz | 1 | 16 Hz |
| L | 71 Hz | 2 | 24 Hz |
| M | 105 Hz | 3 | 33 Hz |
| H | 186 Hz | 4 | 52 Hz |
| | | 5 | 75 Hz |
| | | 6 | 100 Hz |
| | | 7 | 155 Hz |
| | | 8 | 215 Hz |

IR GAIN

| | |
|---------|---------|
| IR Gain | 0 - 699 |
|---------|---------|

UV GAIN

| | |
|---------|--------|
| UV Gain | 0 - 99 |
|---------|--------|

SPECTRAL RESPONSE

| | |
|----|-----------|
| UV | 190-215nm |
|----|-----------|

| Model # | Type | Gas (Hydrogen, Propane, NG) | Gas Low NOx Burners | Oil (Heavy Oil - air & steam atom) | Low NOx Pulverized Coal |
|---------|-------|---------------------------------|-----------------------|------------------------------------|---------------------------------|
| S550 | UV/Ge | Disc Excellent | Disc Good | Disc Excellent | Disc Excellent Sig Very Good |
| S552 | Ge | Disc good Sig Good | Disc None Sig Fair | Disc Very Good Sig Good | Disc Good Sig Good |
| S556 | UV | Disc Excellent Sig Very Good | Disc Good Sig Good | Disc Excellent Sig Poor | Disc Excellent Sig Very Poor |

For more details, please contact:

IRIS 
Systems Inc.

#250-8208 Swenson Way
Delta, BC., V4G 1J6
1-800-667-IRIS, 1-604-584-IRIS,
Fax: 1-604-581-9790

IRIS



FLAME MONITORING SYSTEM

S550, S552, S556 VIEWING HEADS



WORLD LEADER IN FLAME MONITORING

S550 GENERAL DESCRIPTION

eters are:

| | |
|------------------|-------|
| | 0-99 |
| | 0-699 |
| Filter Selection | 1-8 |

adjusted, the new parameters are stored in EEPROM signal processor. If power is removed from the signal processor, which powers the viewing head, and reapplying power to the signal processor then automatically re-sends the parameters out to the S550 viewing head. In addition, at the front panel of the signal processors the operator may also select "CAL", a semiautomatic mode which helps to speed up the S550 setup. Thus, the S550 is a sensor viewing head where the gain and filter selection are adjusted and stored remotely by the P520/P522 processors.

S552 GENERAL DESCRIPTION

S552 is for IR sensing only. It is basically an S550 with UV capability. The P520 or P522 will be aware of the S550 family is connected to the signal processor appropriate to the viewing head. These

S556 GENERAL DESCRIPTION

with the UV sensor or the IR sensor; in "CAL" mode he is only offered the choice of calibrating with the UV sensor or not.

COMPARISON WITH OTHER MODEL 500 SERIES VIEWING HEADS

The S550 uses a Germanium sensor for IR detection, like an S511 and uses a high-voltage vacuum tube sensor for UV detection, like the S506, but both sensors are in the same housing in the S550. The pulses from the UV and IR sensors are summed internally into a single pulse stream out to the signal processor.

A dual-LED indicator is used to indicate the pulse rate out of the S550. It is visible at the rear of the viewing head housing. For every 128 pulses from the UV sensor it emits one green pulse; for every 128 pulses from the IR sensor it emits one red pulse. With a count rate of 1200 displayed at the signal processor the LED will flash 9 or 10 times per second. This is very useful for aiming and sighting the viewing head. One can readily distinguish differences in pulse rates at the LED and use this indicator to adjust the sighting to obtain a maximum pulse rate at the LED and therefore a maximum reading at the signal processor.

Another difference from other models is that the gain for each sensor and the selection of the filter for IR may be adjusted through the front panel of the P520/P522 signal processor.

- IRIS 
- IRIS 
- IRIS 
- IRIS 
- IRIS 
- IRIS 
- IRIS 
- IRIS 

S550 Combination UV/IR Viewing Head Attributes

- IRIS  FM, CSA & NRTL/C Approved
- IRIS  LED indicates flame signal strength for optimal sighting, also indicates UV/IR
- IRIS  NEMA 7 or Eexd housing available
- IRIS  Compatible with all IRIS series 500 signal processor
- IRIS  FlameTool NT/95 compatible

S552 IR Only Viewing Head

S556 UV Only Viewing Head