Honeywell

ALL-IN-ONE SCANNER AND PROCESSOR INDUSTRIAL FLAME MONITORING SYSTEM

U2-1010 SERIES VIEWING HEADS



WORLD LEADER IN FLAME MONITORING

Three sensor configuration:

- Infrared Photodiode: 1400nm with flicker detector filter.
- UV Photodiode: 310nm with flicker detector filter.
- UVtron: 230nm UV detector.

Inputs:

• 24 Volt DC supply 0.15 amp maximum current:

Outputs:

- Two normally-open contacts for self-check and flame relays with shared common. Contacts rated at 2A, 250VAC or 30VDC
 - o Flame relay.
 - o Self check relay.
- Cpcmi output
 - o 4 to 20 or 0 to 20 milliamp flame strength.
 - o (Special order configuration) raw flicker output from either sensor (Flame Doctor).
- 7800 Honeywell
 - o Single wire interface for the 7800 series BMS.
- Serial communications
 - o RS485 Modbus compatible interface with 300 registers
 - o IRDA (IrComm) optical interface with Modbus layer.

Connections

- 3 to 10 conductor fly lead cable.
- 3/4" NPT male conduit connection for wiring
- High pressure 1" NPT flame sight mount
 - o Requires: Purge air coupler R-518-CL12-PG and (isolation)PT adapter R-518-PT12

Files:

- Pre-defined settings files selectable by a single wire.
- Up to 8 selectable files.

User interface

- Display
 - o Full character 4 digit scrolling LEDs visible in the dark or sunlight.
 - o 3 Discrete single color LEDs flashing with the sensor signal
- Red IR, Blue UV Solid state, Green UVtron
 - o Green status LED (heartbeat flashes with self checking operation).
 - o Separate Red LED for relay status (hardware connected to flame relay).
- Touch Screen
 - o Full control through the tempered glass touch sensor
 - Two button interface
 - o Circular scroll finger interface "Touch Wheel"

Optical:

- Fused Silica Lens (UV grade)
- Viewing angle 5° for both UV sensors and 1° for the IR sensor

Environmental:

- Aluminum housing with tempered glass sight window.
- Cpprovals (Explosion Proof Class 1, Division 1, Zone 1)
 - o FM ,CSA"cpf "ATEX, IECEX"*KXI "Gz"f "KXE"V8"\ qpg"3"cpf "4+
- Waterproof (to NEMA 4X) IP89
 - o Fully sealed
- Temperature -40° C to +70°C

Safety:

- Electrical interruption of IR and solid state UV sensor signals for self-checking
- Cr provals:
 - o SIL/5, MISRA, CSA, UL1998

Technology:

- Industrial ARM cortex processor
 - o Flash memory upgradeable.
- Digital to analog gain control (scaled 0 to 99)
- High speed analog to digital sampling and flicker filter calculations. (8 to 300 Hz)

Security:

- User selectable passcode can be required for access.
- All interfaces are lockable.
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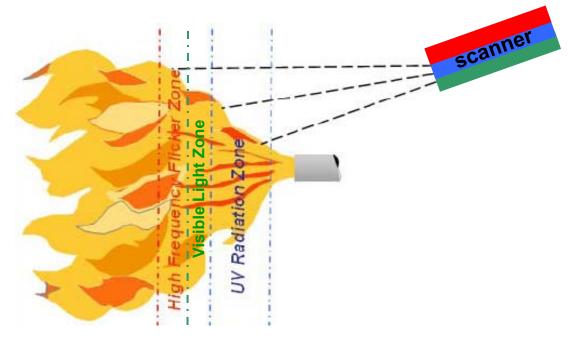
Industrial Flame Monitoring

Integrated IR / UV Viewing Head & Signal Processor



U2-1010

Multi-burner/fuel, Low NOx, Difficult flame detection, limited space



Integrated IR / UV Viewing Head & Signal Processor



- The U2 has a unique touchscreen interface
 - Circular scroll finger "touch wheel" menu structure (similar to the iPod®)