High Temperature Furnace Monitoring System **TFV 750/1100**

**Introduction**
Our high-temperature Furnace monitoring system provide plant engineers and operators in the control room with views of burner flames, material alignment and movement, and other process conditions in furnace, kiln, heating stove or other combustion chamber.
We use special color camera above 480 lines, pinhole lens and stainless steel camera housing with water and air cooling system, enabling the system to work in high temperature environment.
The system has auto-retraction and auto insertion function. The camera will exit out of the furnace, when the temperature of the inner camera housing is higher than the setting value or the pressure of compressed air & flow of water is lower than the setting value or the power failures.

**Application**
- CEMENT KILN & COOLER
- GLASS FURNACE
- METAL REHEAT FURNACE
- POWER BOILER etc.

**Technical Data**

- **Environment**
  - Up to 2000°C
- **Cooling system**
  - Vortex air & Water cooling
- **Transmission device**
  - Pneumatic
- **Power**
  - AC 220V

**Requirement of Compressed Air**
- **Pressure**
  - 2 ~ 7 Kg/cm²
- **Volume flow**
  - 5 m³/h
- **Temperature**
  - <35°C
- **Quality**
  - Clean, Dust, Oil & Moisture free air

**Requirement of Cooling Water**
- **Inlet pressure**
  - 1 ~ 7 Kg/cm²
- **Volume flow**
  - 0.2-1 m³/h

**Camera**
- **Image sensor**
  - 1/3” HD Color CMOS Sensor
- **Resolution(HxV)**
  - 752 x 480 pixels
- **Interface**
  - Gigabit Ethernet
- **Frame Rate**
  - 117
- **Shutter Speed**
  - Global Shutter (10 µs to 10s)
- **Min Illumination**
  - 0.2Lux (F1.2. 30 IRE) / 0.001Lux (F1.2, X128 DSS)
- **Power source**
  - DC 24 V
- **Power consumption**
  - Max. 4W
- **Operating System**
  - Windows®
- **Special Features**
  - Frame Average, enhanced color and I/O functionality, PoE, automatic gain/exposure control, binning, PLC inputs, pre-trigger recording, internal temperature sensors, FFC, screw lock connectors

**Pinhole lens**
- **Lens length**
  - 787 mm & 1080mm
- **Focal length**
  - Fixed 3.5 mm or adjustable from 3.6-18mm
- **Angle of view**
  - Horizontal 89°
  - Vertical 68°
  - Diagonal 112°
- **Iris**
  - Manual
- **Mount**
  - CS
System Features

- Auto Pneumatic retraction and insertion in case of failure of air, water supply and increased temperature.
- Water cooled lens tube assembly.
- Vortex air cooled camera chamber.
- Auto shut off gate.
- Air purged wall sleeve.
- Long pin hole optical tube.
- Wide angle of view.
- Front lens withstand high temperature.
- Manual Focusing, Iris Control.
- Control Cabinet with PLC, Pneumatic control system.
- Air Tank with filters.
- High Dynamic CCD Camera.