

Temperature Measurement of Heating Furnace through Fire

Challenge

- Internal temperature measurement is required while furnace is active, in order to determine maintenance schedule.
- Furnace thermocouple is attached, but temperature of other positions are also concerned.

Avio Solution

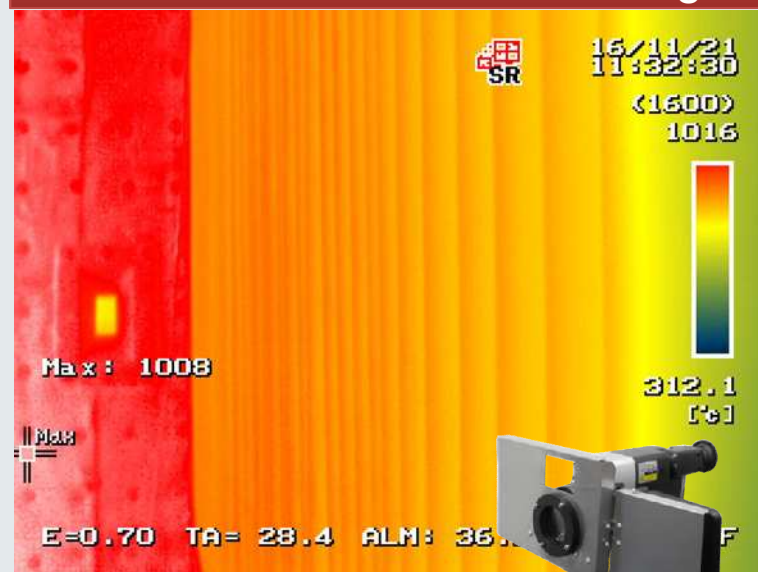
- ◆ Maintenance free by un-cooled sensor
 - ◆ Quick start up after power on
 - ◆ Special wavelength (3.7~3.9 μ m) band pass filter allows measurement through fire !
 - ◆ Protective shield keeps operator safe from radiant heat
- CBM (Condition Based Maintenance) is possible while furnace is running

Visible Image



Internal wall surface is heated by complete combustion flame (Approx. 1000 °C) radiated from nozzle.

R300BP-TF Thermal Image



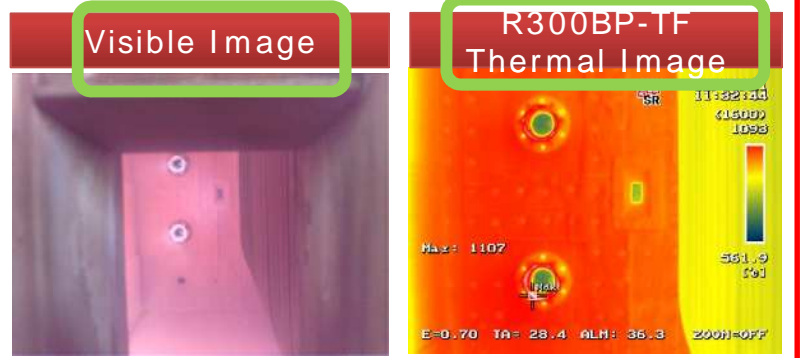
Real-time abnormal temp. check of nozzle and wall surface is available through flame .

* Measured by model R300BP-TF

Avio "R300BP Series" for Special Measurement

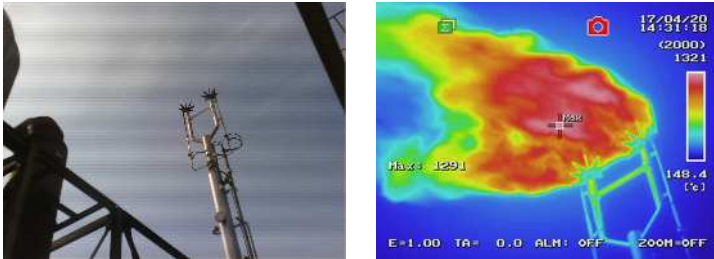
R300BP-TF

- ◆ Measurement through fire
- ◆ Wavelength : 3.7 to 3.9 μ m
- ◆ Range : 400~1500
- ◆ Resolution : 4.0 at 400
- ◆ Accuracy : \pm 4%
- ◆ Number of Pixels: 320 x 240



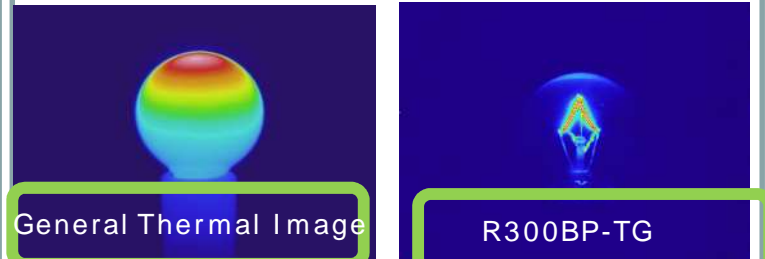
R300BP-OF

- ◆ Measurement of flame
- ◆ Wavelength : 4.25 to 4.75 μ m
- ◆ Range : 600~2000



R300BP-TG

- ◆ Measurement through glass
- ◆ Wavelength : 3.0 to 3.5 μ m
- ◆ Range : 500~1000



R300BP-OG

- ◆ Measurement of glass surface
- ◆ Wavelength : 5.2 to 7.4 μ m
- ◆ Range : 400~1500



Please ask us of your requirements such as band pass filters and/or additional range of 0 ~500 (8-14 μ m)

For R&D purchase of special wavelength

H9000 High-spec IR Camera

- ◆ Frequency : Max 1KHz (Windowing時)
- ◆ Sensitivity : 0.025
- ◆ Resolution : 640 x 512
- ◆ FOV : 21.7° x 17.5°
- ◆ IFOV : 0.6 μ m



Avio offers most suitable model for all of your measurement needs.

 NIPPON AVIONICS CO.,LTD.

Overseas Sales Department
 Industrial Electronic Products Sales Division
 4206, Ikonobe-cho, Yokohama, 224-0053, Japan
 TEL +81-45-930-3596
 Fax +81-45-930-3597
 E-mail : product-irc-e@ml.avio.co.jp

<http://www.avio.co.jp/english/>



WARNINGS & CAUTIONS

- Before using this product, please carefully read the provided Operation Manual "WARNINGS" & "CAUTIONS" section to ensure proper operation.
- Please do not place the product in high temperature, high humidity or high inert gas environments.

Distributor: