Surface Temperature Distribution Measurement of Aluminum

- Accurate measurement of Al is very difficult due to its low emissivity.
- Thermocouple cannot tell if it measures uniformly.

Avio Solution

- World-first!* Technology to measure temperature of low emissivity object by eliminating influence of reflection
- Good news for automotive industry! Highly accurate measurement is possible when material is changed from Fe to Al for body weight reduction.
- High precision measurement of mold to support quality control.

Support weight reduction for all-electric vehicle development

Due to influence of reflection, measurement of actual temperature and temperature distribution is difficult, even emissivity compensation is used.

*As of July 2017. It may be affected by environmental temp. etc.
Avio Thermography Line up for Special Measurement

**Measement of low emissivity object**
- Custom order item
- Pixels: 320 x 256
- Frame rate: 100Hz
- External I/F: Gig-E
- Range: 160°C~(Al) 180°C~(Cu)
- Accuracy: ±4°C or ±4%

**R300BP-TF**
- Measurement through flame
- Wavelength: 3.7~3.9μm
- Range: 400~1500°C

**R300BP-OF**
- Measurement of flame
- Wavelength: 4.25 to 4.75μm
- Range: 600~2000°C

**R300BP-TG**
- Measurement through glass
- Wavelength: 3.0 to 3.5μm
- Range: 500~1000°C

**R300BP-OG**
- Measurement of glass surface
- Wavelength: 5.2 to 7.4μm
- Range: 400~1500°C

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.

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