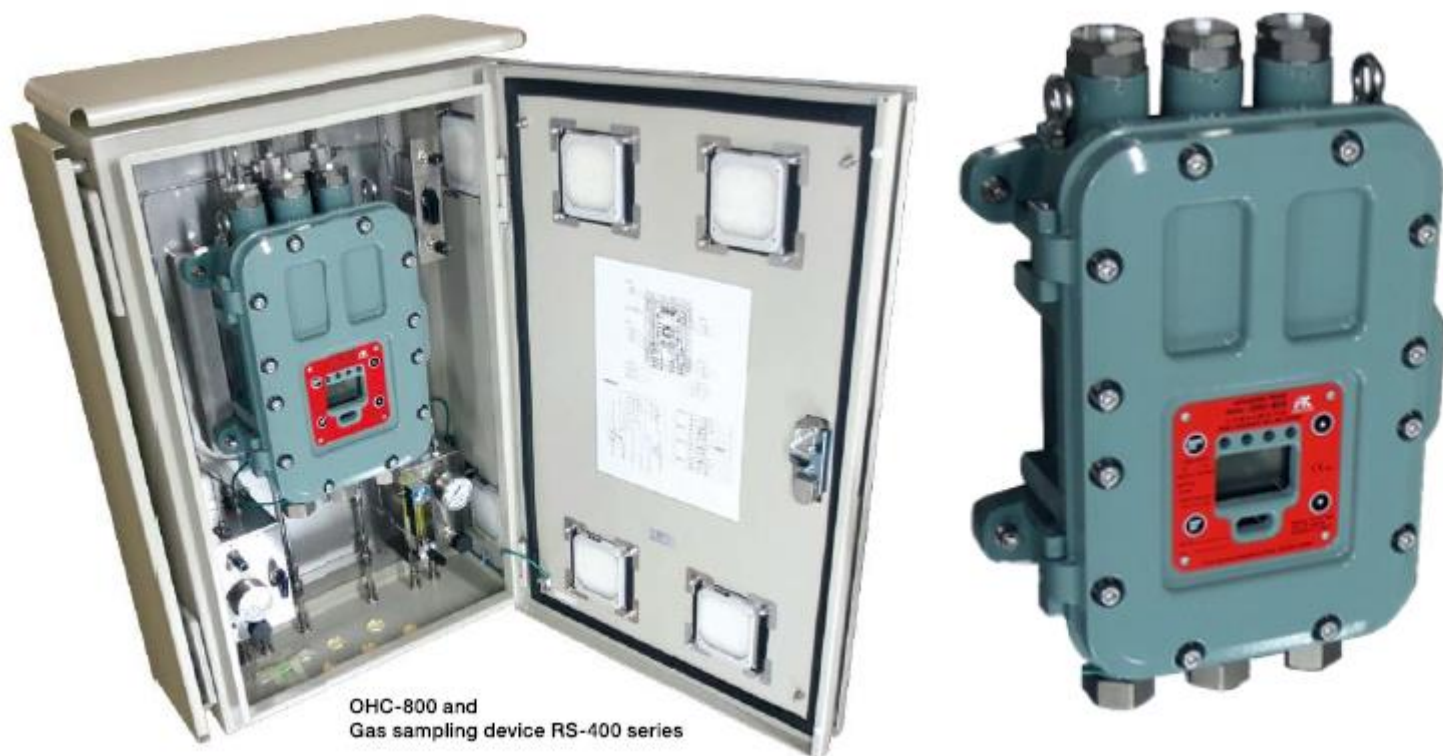


CALORIMÈTRE ANTIDÉFLAGRANT OHC-800

Mesure du pouvoir calorifique, de la densité, de l'indice de méthane et de l'indice WOBBE.



- Le principe de mesure unique "calcul Opt-Sonic" est appliqué. Cela permet de minimiser les effets d'interférence causés par les gaz parasites et d'obtenir un résultat de mesure de haute précision.
- Structure antidéflagrante même pour l'hydrogène II2G Ex db IIB+H2 T4 Gb <ATEX / IECEx>.
- Il est facile de basculer l'affichage entre "Valeur calorifique", "Densité" et "Indice WOBBE" par simple pression sur un bouton.
- Température de fonctionnement étendue -20~+60 degrés C
- Haute répétabilité +/-0.02MJ/m3

Fiche technique Calorimètre

Model	OHC-800
Measuring principle	Opt-Sonic calculation through measurement of refractive index and sound speed
Measuring gas	CH ₄ basis Paraffinic Hydrocarbon gases as represented by Natural Gas ^{*1}
Measuring targets	Calorific value (Density / WOBBE index selectable)
Measuring range ^{*2}	Calorific value: 25.00–50.00 MJ/m ³ (Gross, 0 degree C, 101.325kPa converted) Density: 0.500–1.500 (Specific gravity converted)
Measuring method	Constant-flow-rate gas introduction using external sampling devices
Display	Full-dot LCD (with backlight), 3 color LED lamp
External Output	4-20 mA DC (isolated, source current type) maximum load resistance of 300 Ω / RS-485 communication
FAILURE alarm	Low flow, Sensor unit abnormality, Low light amount
FAILURE alarm display	Lamp (red) / Content indication on LCD
FAILURE alarm contact ^{*3}	No-voltage contact 1a or 1b De-energize (Energize when alarming) or Energize (De-energize when alarming) Contact capacity of 2 A, 30 VDC (resistance load)
Self-diagnostic function	FUNCTION CHECK (warm-up or maintenance mode), MAINTENANCE REQUIRED, OUT OF SPECIFICATION
Self-diagnostic display	FUNCTION CHECK, OUT OF SPECIFICATION: Lamp (orange) / Content indication on LCD MAINTENANCE REQUIRED: Lamp (green) / Content indication on LCD
Self-diagnostic contact	FUNCTION CHECK, OUT OF SPECIFICATION: No-voltage contact 1a or 1b De-energize (Energize when alarming) or Energize (De-energize when alarming) Contact capacity of 2 A, 30 VDC (resistance load) MAINTENANCE REQUIRED: SSR contact, contact capacity of 20 W, 240 VAC (resistance load)
Power supply	100 - 240 VAC ±10%, 50/60 Hz, max. 18 VA or 24 VDC ±10%, max. 5 W (The setting can be changed to either the AC or DC)
Ingress Protection level	Equivalent to IP66 and IP67
Operation temperature	ATEX / IECEx: -20~+60 degree C (no sudden changes) / Japan Ex: -20~+57 degree C (no sudden changes)
Operation humidity	95%RH or less (no condensing)
Outer dimensions / Weight	Approx. 286 (W) x 453 (H) x 150 (D) mm / Approx. 23 kg
Explosion-Proof structure	Flame-proof enclosures (Explosion-proof class: IIB+H ₂ T4 Gb <ATEX / IECEx> / Exd IIB+H ₂ T4 <Japan Ex>)

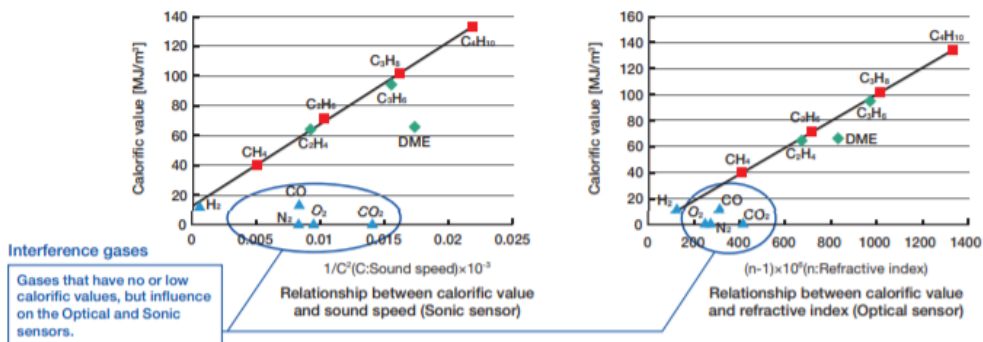
*1 Total concentration of interference gases such as N₂, O₂, CO₂, CO etc. contained in a target gas is estimated as less than 20%

*2 Contact RIKEN KEIKI for the other measuring ranges

*3 Contact setting is adjustable

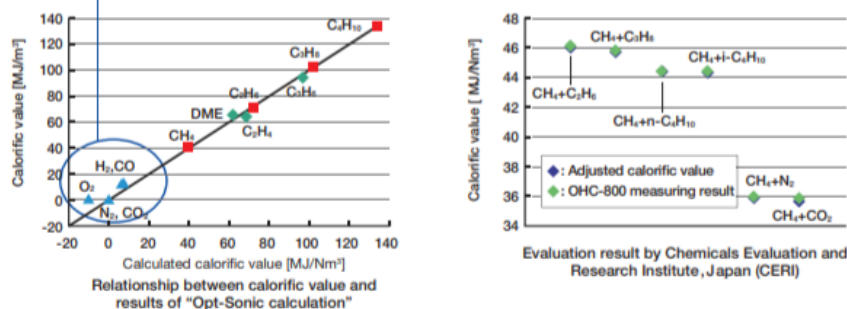
[What is "Opt-Sonic calculation" ?]

Optical sensor and Sonic sensor are individually used for a calorimeter, but both sensors have the interference effects on the reading caused by interference gases such as N₂, O₂, CO₂ etc.



"Opt-Sonic calculation" using measuring results of the Optical sensor and Sonic sensor can minimize the interference effects caused by interference gases, and realize a high-accuracy measurement.

Minimized the interference effects caused by interference gases



Evaluation result by Chemicals Evaluation and Research Institute, Japan (CERI)