# AUD500C

# **Explosion-Proof Advanced Ultraviolet Detector**

The AUD500C is an explosion-proof flame detector designed to sense the ultraviolet radiation from an oil or gas burner flame. This unit is used in combination with the dedicated AUR400C/450C or AUR300C/350C. Any malfunction that has occurred in the UV detector or UV relay can be detected by the continuous self-checking function of the built-in shutter driven by the relay, ensuring highly reliable combustion safety control.



## **Specifications**

Explosion-proof housing/	Ex d II C T4 (Ex = explosion-protected construction, d =
explosion-proof setting	flameproof type (housing), II = electrical apparatus group, C =
	classification of gas or vapor, T4 = classification of maximum
	surface temperature).
	Certified by the Technology Institute of Industrial Safety (No.
	TC17035) and NEPSI, the National Supervision and Inspection
	Center for Explosion Protection and Safety of Instrumentation
	(China)
Applicable flames	City gas, natural gas, propane gas, kerosene, heavy oil, coke oven
	gas, hydrogen, chlorine, ammonia, naphtha, ethylene, etc.
Shutter voltage	Approx. 24Vdc (supplied from AUR UV relay)
Self-checking cycle	Approx. 75 cycles/min
Ambient temperature	-20 to +60°C
Storage temperature	-20 to +70°C
Storage humidity	90% RH at 40°C (no condensation allowed)
Pressure resistance for flange	690kPa
Protective structure	IP67
Mounting direction	-45° to +90° (in side view)
Mounting (on the mounting	Flange: parallel pipe thread G2-1/4
pipe)	Conversion adapter: taper pipe thread R1
Lead wires	AWG18 heat resistant silicone cables (4 pcs)
Flame signal wire requirements	IV wires with 2.0 mm <sup>2</sup> and max. 200m in length
and extension distance	
Material	Aluminum
Main body color	Purple
Mass	Approx. 2.5kg
UV tube effective service life	Replace after 25,000 hours of use or the lifetime specified on the
	UV tube (3 years).

#### **Selection Guide**

Model No.	Description
AUD500C21010	Explosion-proof advanced ultraviolet detector
AUD500C2101D	Explosion-proof advanced ultraviolet detector with inspection data

### **Accessories (sold separately)**

Model No.	Description
81441151-001	Adapter (G2-1/4 → R1)
AUD10C2100	Tube unit (replacement part)
AUD50A2100	Shutter unit (replacement part)
AUD60A2110	Maintenance kit (AUD10C/AUD50A set)

**Dimensions** (Unit: mm)

