# **CU1 Range - COMBINATION - BEACON SOUNDER**



## Exde, Weatherproof



#### Introduction

This range of beacon/sounder units, intended for use in potentially explosive gas atmospheres, has a power rating of up to 10 watts (sounder) and 10 joules (beacon) and is suitable for use in the harsh environmental conditions found offshore and onshore in the oil, gas and petrochemical industries.

The flamepaths, flare and body are manufactured from a UV stable glass reinforced polyester. Stainless steel screws and mounting stirrup are incorporated to ensure a corrosion-free product. A tapered flamepath is used to overcome the problems of assembly of parallel spigot flamepaths.

Authorized Distributor: GasDetectorsUSA.com Houston, TX USA 832-615-3588 sales@GasDetectorsUSA.com

#### **Features**

- Zone 1, Zone 2 & non-Ex use.
- Exde IIB T3.
- ATEX approved, Ex II 2 G.
- IECEx approved, Gb.
- CENELEC approved.
- GOST 'R' & 'K' certified.
- BASEEFA certified.
- Brazilian (Inmetro) certified.
- IP66 and 67.
- Certified temperature: -50°C to +60°C\*.
- Up to 116 dB(A)\*.
- Version with independent beacon/sounder operation now available.
- 27 Tones, user selectable (dual tone option d.c. voltage).
- Tones comply with UKOOA/PFEER guidelines
- Integral volume control
- GRP corrosion-free flamepath.
- Ratcheted swivel mouting stirrup.
- Stainless steel fixtures.
- Tapered flamepath.

\*Model dependent.





### Specification

**Certification:** Certified to IEC60079-0, IEC60079-1, IEC60079-7

Certified to EN60079-0, EN60079-1, EN60079-7 ATEX Ex de Cert No.Baseefa04ATEX0273X

Ex de IIB T3

IECEx Ex de Cert No.IECEx BAS 11.0149X

Ex de IIB T3 Gb Zones 1 & 2.

Brazilian (Inmetro) Certified: BR-Ex de IIB T3

GOST R Certification: 2 EXde IIB T3

Russian Fire Approval.

GOST K Certification: Exde IIB T3

American Bureau of Shipping Type Approval CU1S, CU1SW, CU1H,

CU1HW only.

**Material:** Body, flares & covers: Glass Reinforced Polyester (GRP).

Lens: Glass

Guard fitted as standard

Cover screws & mounting strap: Stainless steel.

Finish: Natural black or painted to customer specification. Certified Temp: Standard unit:  $-50^{\circ}$ C to  $+50^{\circ}$ C (CU1-S & CU1-SP)

High temperature unit:  $-50^{\circ}$ C to  $+60^{\circ}$ C (CU1-H & CU1-HP)†. †*Please contact Cooper MEDC Technical Sales*.

Weight: 6.5kg approx. Ingress Protection: IP66 & IP67.

Entries: Up to 2 x M25, 2 x M25 ISO, 2 x M20 with 1/2" NPT adaptor or 2 x M25 with 3/4" NPT adaptors into termination (Exe) chamber.

**Terminals:** 8 x 4.0mm<sup>2</sup>.

Output: Standard unit: sounder 10 watts, beacon 5 or10 joules.

High temp. unit: sounder 5 watts, beacon 5 or10 joules.

**Relay Initiate:** Available on all versions – operates with 24V d.c. initiate supplies only. **Mounting:** Stainless steel bracket with ratchet facility.

**Earth Continuity:** Available as an option.

**Labels:** Duty and tag label option to customer's requirements.

Sound Output: Sound Standard unit:  $116dB(A) \pm 3 dB(A)$  (tone dependent). High temp. unit:  $110 dB(A) \pm 3 dB(A)$  (tone dependent).

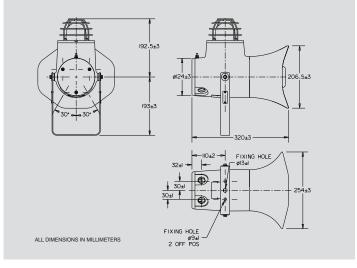
**Tone Selection:** 27 user selectable tones.

**Two Stage Unit:** Switchable between any two tones by either:

(i) Reversing the polarity\* of the supply, or

(ii) By a 3 wire common +ve system, switching between the two – ve lines. If a two stage unit is ordered with either Independent Sounder/Beacon operation or Telephone or Relay Initiate, it will be wired for reverse polarity tone switching only, to allow loop in, loop out installation. Note: Two stage unit available in d.c. versions only.

\*Will not affect beacon operation



#### **Current Consumption at full power:**

out		
Input Voltage	10 Joule Beacon Sounder@ 60 fpm	5 Joule Beacon Sounder@ 60 fpm
24Vd.c.	1387mA	700mA†
48Vd.c.	864mA	
110Va.c.	365mA	
120Va.c.	417mA	
230Va.c.	172mA	
240Va.c.	182mA	
250Va.c.	241mA	

In addition to the 10 Joule CU1, MEDC offers a 5 Joule/110dB(A), 24Vd.c. version. Details are available on request.

#### Integral volume control (Not applicable to CU1H)

*Nominal Output (dBa)	Input Current (mA)
90	460
95	520
100	670
102	720
105	1000
107	1220
116	1387

<sup>\*</sup> Output measured with 24V input voltage. Tone set to 970Hz continuous, with 10 joule beacon set to 60 fpm.

### Ordering Requirements

The following code is designed to help in selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box. **Standard products available for immediate shipping - contact sales office for details.** 

