

**FLAMEPROOF WALL MOUNTING INDUSTRIAL PA STATION LDD 8823**

**D.D. Electronic Equipments Pvt Ltd.,**

(A leading Manufacturer, Sales & Service Providers in Industrial Communication & Fire Alarm Systems)

**Presents Flame proof/Weather proof Intrinsically Safe Paging System suitable for Hazardous areas.**

**Salient Features:**

EQUIPMENT IS CERTIFIED FOR USE IN HAZARDOUS AREAS GAS GROUPS I, IIA & IIB and ZONE 1 & 2 ATMOSPHERES AREA.

- FLAMEPROOF TESTING IEC 60079-1:2007
- IP PROTECTION CLASS IP 55 (WITHOUT CANOPY)
- TEMPERATURE CLASS T6
- IP PROTECTION CLASS IP 65 (WITH CANOPY)
- CMRI CERTIFICATE NO. CIMFR/TC/SR/410 Dt. **27.08.2013**
- INTRINSICALLY SAFE TESTING IS:5780-2002(IEC 60079-11(1999))
- CMRI CERTIFICATE - IS CKT CIMFR/TC/P/H113 Dt. **16.05.2007**
- TWO INDEPENDENT COMMUNICATION CHANNELS (PRIVATE & PAGE)
- CONSTRUCTION- SUITABLE FOR EASY INSTALLATION & SERVICING
- COMPATIBLE WITH PHILIPS/BOSCH & SIMILAR MAKE PAGING SYSTEM
- SIMPLICITY OF OPERATION
- DISTORTION FREE COMMUNICATION ON BOTH CHANNELS
- FRONT PANEL BUSY INDICATIONS
- INDEFINITE SHORT CIRCUIT (BOTH CHANNELS) PROTECTED
- OPERATING VOLTAGE SELECTION PROVIDED: DC (36V) SUPPLY & AC SUPPLY (110V/240V AC)

**TECHNICAL SPECIFICATION**

Flameproof/intrinsically Safe Handset Station

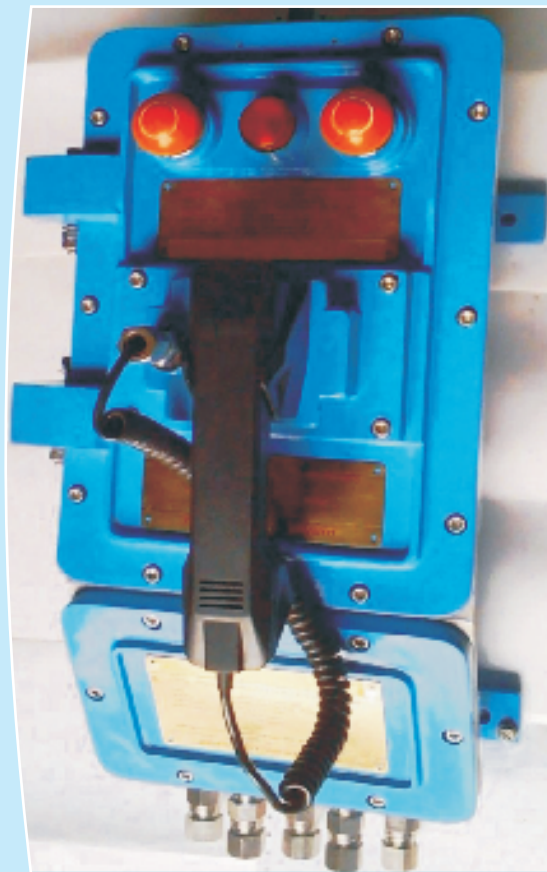
**LDD 8823**

**GENERAL**

LDD 8823 is a flameproof communication station with an intrinsically safe handset. This unit is suitable for paging and communication applications in industrial areas having hazardous atmospheres. The main enclosure of the equipment is designed to meet requirements of flameproof as per IEC 60079-1:2007 (for gas groups IIA and IIB) and weatherproof for IP-55. The handset is rendered intrinsically safe by using protective circuits housed inside the flameproof enclosure.

**MECHANICAL SPECIFICATIONS FLP ENCLOSURE**

The flameproof enclosure is a two-compartment housing comprising of a main FLP compartment and FLP terminal compartment. Further, an IS (intrinsically safe) terminal chamber cover is provided on the cover of the main



compartment. All these parts are made up of LM-6 cast aluminium alloy of recommended composition. At the bottom of the FLP terminal compartment, 5 nos. of integrally cast bosses are provided.

Two the detachable covers of the FLP enclosure: namely, the main compartment cover and the FLP compartment cover; are fitted with warning inscription plate of brass indicating "DO NOT OPEN WHEN ENERGIZED". Additionally, a rating/instruction/name plate of brass is also provided on the cover of the main compartment, IS terminal chamber.

The cover of the main compartment of the FLP enclosure also carries 7 nos. of flameproof terminals for bringing intrinsically safe (IS) circuits out of the main FLP enclosure. These terminals are protected via an IS terminal chamber made up of LM6 cast aluminium alloy. The terminal cover also carries a cradle assembly on the front for mounting the IS handset assembly.

**IS handset assembly:**

The IS handset assembly comprises of a main body (carrying the mouthpiece and earpiece transducers) and a retractile cord assembly. The main body is made up of ABS molded plastic. A special protective circuit is housed inside the flameproof enclosure renders the handset intrinsically safe.

**WEIGHT**

The Net Weight is 16 Kg. Net & 19.50 Kg is packed(IN WOODEN CRATE).

**COLOR :**

FLP Enclosure : Blue.  
IS Handset : Black

**CONTROLS AND FACILITIES :**

This station offers two channels of communication viz. Page and Private. Normally when the Handset is resting in the cradle, it is not connected to any of these channels and the station can only "receive" incoming signal on Page channel. This signal is reproduced over the external horn LS.

When the handset is lifted off the cradle, it gets connected to the private channel and duplex communication is possible via the handset. During this mode the station is still capable of receiving signal on Page channel and reproducing it over the external horn LS. An indication lamp on the front cover of the station lights up whenever the private channel is busy. While the handset is off the cradle if the Page switch is pressed; the handset gets connected to the Page channel, (as long as the switch is held pressed) and paged announcement can be broadcast to all the stations connected to the system cable. An alert tone is also generated by the station to precede every paged announcement.

A Call/Mute switch provided on the front cover, when pressed serves two functions:

The external horn LS is muted (This is an useful feature for carrying out E undisturbed conversion over the private channel). A Call request signal is sent over the system cable.

**ELECTRICAL SPECIFICATIONS :**

**Power Supply :**

**Rated supply voltage** : 240V, 50 Hz (+/-10%)

**Current consumption** : 85 mA (typ.) with Normal condition  
: 175 mA (typ) With Full load condition

**Optional provisions** : The unit may be wired to operate from 240V/110Volts (50Hz) AC and 36V DC

**TRANSMISSION SECTION :**

**Rated output voltage** : 2.00V rms across 240 ohms  
**Input voltage for rated O/P** : 3 mV (+/-1 dB)  
**I/P impedance** : 10K ohms (typ.)  
**Frequency response (+1/- 3 dB)** : 200Hz to 10KHz  
**Distortion** : < 1% a 1KHz  
**Signal to Noise ratio** : Better than -60 dB (unweighted)

**RECEIVING SECTION :**

**Rated input voltage** : 2.00 V rms  
**Rated output power** : 15 W in 8 ohms & 15 W in 16 Ohms. (Optional provided)  
**Volume Control settings** : Internal Taps provided for Volume Settings. 0 dB, -3dB, -6 dB, -12 dB settings.  
**Frequency response (+1/-3dB)** : 200Hz to 12KHz  
**Distortion** : < 1% @ 1KHz  
**Signal to Noise ratio** : Better than -60 dB  
**LF attenuation when speech filter is activated** : -12dB attenuation at 200Hz.  
**Temperature limited O/P power** : 20% of rated power

**Control signals :**

**Call request send** : Active Low (L= 2.0V max, L= 0.01V min.)

**Protection:**

Output lines to external LS are short circuit protected. Also the communication channel lines can withstand indefinite short circuit.

The unit meets safety requirements as per IEC-65.

**ENVIRONMENTAL SPECIFICATIONS :**

**Intended operating environment** : Outdoor, not temperature controlled.

**Temperature range :** Operating : -10°C to +55°C  
Storage : -40°C to +70°C

**Relative Humidity :** Operating : < 90% R.H.  
Storage : < 95%

**D. D. Electronic Equipments Private Limited**

**DEALER'S ADDRESS :**

**Work Address :**

32/33, Prestige Plaza I,  
Opp. Formica Akurdi, Pune - 411 035.  
**Tel :** 020 - 27249123/ 24, Mo. : 09595578095  
**E-mail :** info@ddsystems.in  
**Website :** www.ddsystems.in



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**Rated output power** : 15 W in 8 ohms & 15 W in 16 Ohms.  
(Optional provided)  
**Volume Control settings** : Internal Taps provided for Volume Settings.  
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: Storage : < 95%

### MECHANICAL DIMENSIONS :

WIDTH x DEPTH x HEIGHT  
225mm x 270mm x 345mm (+/- 3 mm)