



ALM-Horn/-WF/-MRTU(-BR)

1-channel Digital Input + 1-channel Digital Output +
4 alarm Tone with 120dbm, 8 Red or 8 Blue + 8 Red UltraBright
LED & IP54 waterproof Standard/WiFi/RS-485, Piezo Electric Siren

Features

- Standard Alarm Siren or with Wi-Fi, RS-485 interface
- Modbus TCP, Modbus RTU protocol
- Photo couple input, Open Collector output
- Wide power supply range
- Wide operating temperature range
- Piezo Transducer Output
- Water clear upper cover with 8 Ultra-Bright RED LED, or -BR version with 8 Blue + 8 Red Ultra-Bright LED.
- 4 Selectable Alarm Tone
- NC/NO Input Selectable



Introduction

The ALM-Horn Series include 3 models, -BR with water clear upper cover, Blue + Red LED, ALM-Horn as standard siren, ALM-Horn-WF have WLAN connection complies with the IEEE802.11b/g/n standards, support Modbus TCP protocol & HTML, ALM-Horn-MRTU have RS-485 interface support Modbus RTU protocol.

ALM-Horn series device include 1-channel digital input for any dry contact output such as SA, BA, FA..etc, and 1-channel digital output Each device has 4 kinds of alarm tone, NC/NO input mode select by switches. The ALM-Horn-WF & -MRTU support Modbus protocol, Which makes perfect integration for monitoring or control in SCADA software, HMI Modbus & Utilities. ALM-Horn series have High Sound Pressure output, wide input power range & IP43 waterproof.

Applications

- Building Automation
- Machine Automation
- Testing Equipment
- Security Automation
- Factory Automation
- Fire Alarm System

Specifications

Module	ALM-Horn(-BR)	ALM-Horn-WF(-BR)	ALM-Horn-MRTU(-BR)
Alarm Output			
Piezo Transducer Pressure Level	120 ±5 dB @10cm/3.0 KHz (W/O waterproof membrane)		
LED	Water clear upper cover with 8 RED UltraBright RED LED -BR: With 8 Blue + 8 RED UltraBright LED		
Volume Control	no		
Digital Input			
Channels	1		
Input Type	Dry Contact: Sink		
Dry Contact Level	NO: Open, NC: Close to GND		
Photo-Isolation	3750 VDC		
Input Condition	Pulse Width must > 200 mSec or more		
Digital Output			
Channels	1		
Output Type	Open Collector (Sink)		
Max Load Current	400 mA		
Load Voltage	+3.5 VDC ~ +30 VDC		
Dip Switch Select			
SW1,2	4 kinds of alarm Tone		
SW4	Input Mode (NO/NC) select		
Wi-Fi Interface			
Interface	-	Wi-Fi 2.4 G	-
Standard Supported	-	IEEE 802.11b/g/n	-
Wireless Mode	-	Station & AP (1 Client)	-
Encryption	-	WEP, WPA and WPA2	-
Service	-	TCP, Modbus TCP, HTML	-

Module	ALM-Horn(-BR)	ALM-Horn-WF(-BR)	ALM-Horn-MRTU(-BR)
MRTU Interface			
Interface	-	-	RS-485
Parity /Data bit/ Stop bit	-	-	None/Odd/Even, 8, 1/2
Baud Rate	-	-	300 ~ 115200 bps
Protocol	-	-	Modbus RTU
Watchdog	-	-	Yes, 1.8s
LED Indicators			
Power/Status	2 colors LED, Blue for System status, Red for Alarm status.		
Protection			
ESD (IEC 61000-4-2)	±8 kV Air for Random Point		
EFT (IEC 61000-4-4)	±2 kV for Power		
Environment			
Operating Temperature	-20 ~ +75°C		
Mechanism			
Dimensions (W x L x H)	119 mm x 119 mm x 48 mm		
Installation	Panel Mount/Wall Mount		
Ingress Protection Rating	IP43		
Power Requirements			
Input Voltage Range	12 ~ 48 VDC with Reverse Protection (Vin to GND)		
Consumption	0.4 W Active.	0.7 W Standby.	0.48 W Standby.

Wire Connections

Digital Input wiring		
Digital Input	NO: Alarm ON NC: Alarm OFF	NO: Alarm OFF NC: Alarm ON
Dry Contact	Close to GND	OPEN
Digital Output wiring		RS-485 wiring

Alarm Tones

Index	Switch	Tone
0	ON 1 2 ↓ ↓	
1	ON 1 2 ↑ ↓	
2	ON 1 2 ↓ ↑	
3	ON 1 2 ↑ ↑	

Pin Assignments

ALM-Horn(-BR)/ALM-Horn-WF(-BR)

Terminal NO	Pin Name	Wire Color
1	Vin	Red
2	GND	Black
3	DI	Brown
4	DO	Purple
5	NC	Green
6	NC	Blue

ALM-Horn-MRTU(-BR)

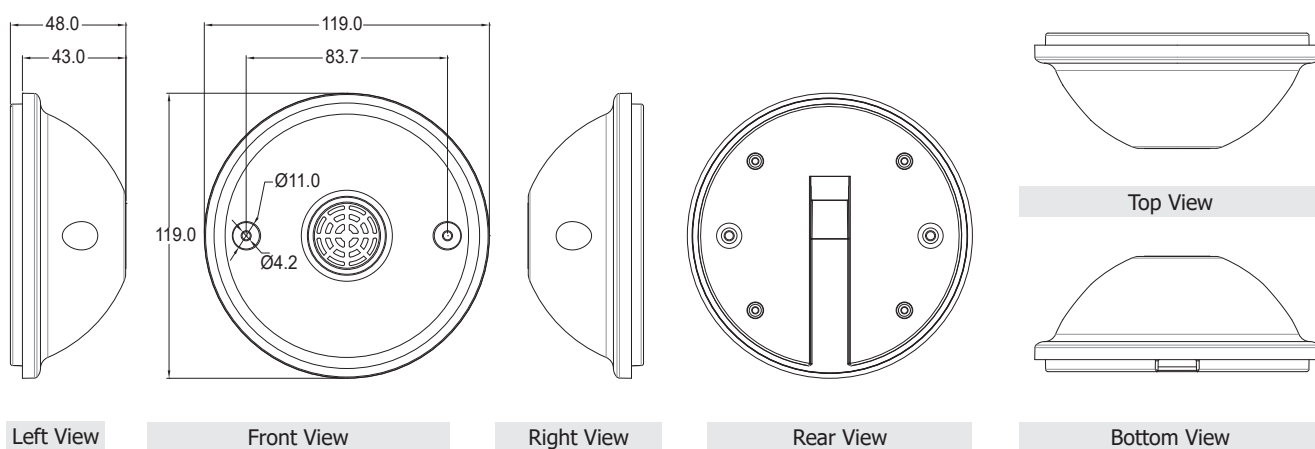
Terminal NO	Pin Name	Wire Color
1	Vin	Red
2	GND	Black
3	DI	Brown
4	DO	Purple
5	D+	Green
6	D-	Blue



Device Photo



Dimensions (Units: mm)



Ordering Information

ALM-Horn-BR CR	Single Input, Single Output, 8 Blue+8 Red LED, 4 selectable Tone, Piezo Transducer Alarm Siren (RoHS)
ALM-Horn-WF-BR CR	Wi-Fi communication, Single Input, Single Output, 8 Blue+8 Red LED, 4 selectable Tone, Piezo Transducer Alarm Siren (RoHS)
ALM-Horn-MRTU-BR CR	RS-485 communication, Single Input, Single Output, 8 Blue+8 Red LED, 4 selectable Tone, Piezo Transducer Alarm Siren (RoHS)