

For
dependable
warning sirens
with clear
tones and
effective voice
communication



TWS-291

All hazard high-power siren system

The TWS-290 series features superior amplifiers and EZ-PULL™ speaker drivers, delivering powerful alarm tones and clear voice communication for effective emergency warnings. Housed in a durable, corrosion-resistant aluminum cabinet, boasting a true 360° sound coverage ensures comprehensive audio dispersion. The system operates at maximum power for a minimum of 30 minutes using TWSBATT 100-12 ensures functionality during critical situations.



Features

- 1 pcs omni-directional modular speaker cell assembled in a vertical column performing a SPL of 109 dB(C) @ 100' / 30 m
- Clear voice reproduction achieving a STI intelligibility index of 0.99
- TWS-291 speaker includes 1 pcs high-efficiency EZ-PULL™ speaker driver
- Speaker cluster made of non-corrosive carbon fiber reinforced polymer (non-metallic material)
- 15 m speaker cable included. FRNC, LSZH, IEC 60228 cl.5 copper strands
- IP66 rated aluminum cabinet with a separate battery compartment
- · 1 pcs high-efficiency Class AB/F power amplifier
- Surge Protective Device included for AC power supply (COAX SPD for antenna included with TWS-RADIO option)
- · Six standard warning tones: Wail, Whoop, Attack, Hi-Lo, Alert, Airhorn
- Customizable alert tones based on customer preferences (optional)
- · Alarm tone generator, automatic and live voice broadcast
- Battery-powered with tone activation for a minimum of 30 minutes of full power output using TWSBATT 100-12 batteries
- · Siren system optimized battery charger
- Local or remote control / status
- Electronic siren controller with SI TEST® for silent self-diagnosis / test
- Full status monitoring, including low battery and amplifier / speaker status



Technical data

Battery charger input	90 - 264 VAC, 47 - 63 Hz, max 4.5 A
Battery charger output	21 - 30.4 V, max 12 A @ 25° C
Batteries (Sold separately)	2 pcs 12 V, AGM, SLA 100 Ah. Deep Cycle. See options
Standby current	82 mA, 24 VDC (typical)
Operating current	18 A, 24 VDC (typical)
Output power per drive	r (typical/max) 400/600 Watts
Total output power	(typical/max) 400/600 Watts

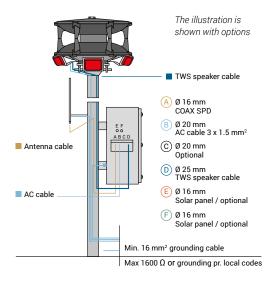
Dimensions TWS-291 speaker

Height	518 mm (20.4")	
Width	848 mm (33.4")	
Weight	48.6 kg (107 lbs.)	

Dimensions Electronics cabinet

Height	845 mm (33.3")
Width	580 mm (22.8")
Depth	385 mm (15.1") / 400 mm (15.7")
Weight	30.0 kg (66.1 lbs.)*
Operating temperature	-35° C to $+60^{\circ}$ C (-31° F to $+140^{\circ}$ F)
Storage temperature	-65° C to +125° C (-85° F to +267° F)
Humidity,	0 to 95%
non-condensing	

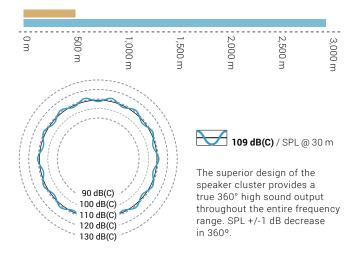
^{*} Weight is exclusive batteries and options.



Acoustic performance

SPL @ 1 m	139 dB(C)
SPL @ 30 m	109 dB(C)
70dB range ISO 13475-1*	2,930 m
70dB range FEMA standard**:	457 m

- * ISO: 6 dB sound pressure reduction pr. doubling of distance (as per ISO 13475-1)
- ** FEMA: 10 dB sound pressure reduction pr. doubling of distance (as per FEMA guidelines)



Ordering Information

Product Description	Order No.	
High-power voice and	TWS-291	
siren system		

Options	Order No.
AGM 12V 100 Ah batteries	TWSBATT 100-12
3000 W direct power supply	TWS-AC-PSU
Mounting brackets for cabinets	TWS-BRACKET
Sun shield	TWS-SUN
Intrusion alarm	TWS-INTRU
Solar power system	TWS-SBC400
Top mounted LED beacon	TWS-TL31R
Visualert LED light cluster	TWS-VALERT
Auxiliary / status control board	AUXCS
GSM solution 2G / 4G	GV-GSM-RTU
IP Interface for TWS-Siren series	GV-IP
DIN rail switch	TWS-SWITCH-SFP
Paging interface	GV-PGINT
Radio VHF / 136-174 Mhz	TWS-RADIO-V
Radio UHF / 403-470 Mhz	TWS-RADIO-U

