

# Lightweight Medium Power Speaker Arrays

## Hyperspike® Series

### Overview

EDWARDS brand Hyperspike Series Medium Power loudspeakers employ exclusive HyperSpike® technology to deliver lightweight and acoustically sophisticated solutions for large indoor and smaller outdoor mass notification installations.

These rugged units are among the industry's smallest in physical size, yet they reproduce some of the clearest and loudest audio signals available for this range of service. Three medium power arrays are available:

The **MN-HSMP650** Series has a 360 degree omnidirectional sound dispersion pattern and can handle 650 Watts of crystal-clear audio power. It is rated for indoor or outdoor use.

The **MN-HSMP300DF** is a grey indoor-rated omnidirectional unit rated for 300 Watts of continuous audio power.

The **MN-HSMP200D** is a directional loudspeaker that handles 200 Watts of continuous audio. It is ideal for indoor applications. The TCPA is intended for outdoor use as well.

The unique design of Hyperspike Series Medium Power loudspeakers allow for a 100 percent up-time duty cycle. When powered from an AC source, they can be powered and ready to perform 24/7. This makes them ideally suited for daily activation, as well as emergency use.

Hyperspike Series Medium Power loudspeakers can be permanently installed, or can be configured for portable use. They can be powered from a local audio power amplifier or from an Hyperspike Series remotely-mounted, factory assembled Electronics Control Cabinet (ECC).

### Standard Features

- Highly intelligible audio performance
- 24/7/365 duty cycle
- Easy, flexible installation
- Lightweight
- Rugged design

#### MN-HSMP650 Series

- Omnidirectional
- 650 Watt Output
- 3,281 ft (1,000 m) usable range
- Indoor and Outdoor Rated

#### MN-HSMP300DF

- Omnidirectional
- 300 Watt Output
- Indoor Rated

#### MN-HSMP200D

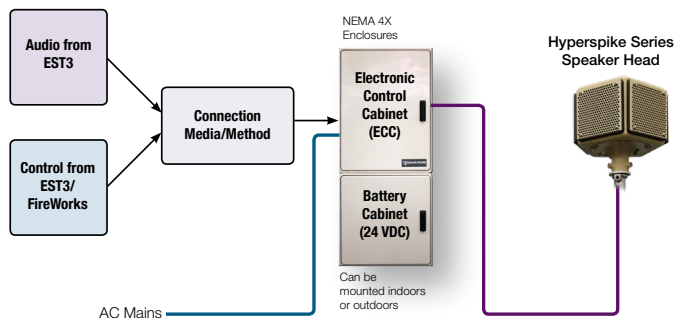
- 70°x80° Sound Dispersion
- 200 Watt Output
- Indoor and Outdoor Rated

## Application

Typical applications for MN-HSMP Series loudspeakers are:

- Large indoor open areas
- Factories
- Production & processing facilities
- Industrial complexes
- Refineries
- Power plants
- Universities, Colleges & High Schools
- Parking lots
- Military bases
- Force protection
- Ships
- Piers
- Docks
- Camp Grounds

## Typical Deployment



## Installation

For optimal performance and safety when installing in permanent locations, Hyperspike Series Medium Power Loudspeakers should be mounted above personnel: typical 20 feet (6.1 m) above floor level. For portable or vehicle-mounted applications the loudspeaker head should be at least 15 feet (4.57 m) above grade and away from people when active. For all installations, it is crucial to have clear, open space around the speaker head. Loudspeaker output is best via line-of-sight.

The available factory assembled Electronics Control Cabinets (ECCs) house audio power amplifiers as well as control and power equipment. The lockable reinforced fiberglass cabinets are rated NEMA 3, 3R, 3S, 4, 4X, 12, 12K and 13. ECCs come ready to interface with the EST3 Emergency Communication Platform, and include an internal inverter/charger system to operate the HPSPSA from the 24 VDC battery compliment in the event of an AC mains power failure. This makes for simple and intuitive control of the units from a single control point or multiple locations. Exterior wiring to and from the ECC is protected by transient protectors.

ECCs can be mounted indoors or outdoors. Mounting options include pole, flange (wall), or pedestal. Heaters and ventilation units are also available. When mounting outdoors, ECC and battery cabinets may be mounted below the loudspeaker head for easy access, but high enough to prevent vandalism.

Typically, the ECC provides the EST3 Emergency Communications platform with the following signals:

- Activation Confirmation
- Incoming AC failure
- Inverted AC failure
- Audio failure
- DC failure
- Door tamper

Medium Power Loudspeakers and ECCs come standard with a one year warranty. Warranties exclude batteries, which carry a 90-day warranty.

## Specifications



**MN-HSMP650**



**MN-HSMP300DF**



**MN-HSMP200D**

Maximum Output	650 Watts	300 Watts	200 Watts
Maximum Sound Pressure (1kHz Tone)	118 dBA Fast @ 1m	119 dBA Fast @ 1m	138 dBA Fast @ 1m
Sound Dispersion (@ 1kHz)			
Horizontal	360°	360°	70°
Vertical	120°	120°	80°
Weight	20 lb (9.1 kg)	22 lb (10.0 kg)	26 lb (11.8 kg)
Height	11.5 in (29.2 cm)	10 in (25.4 cm)	11 in (27.9 cm)
Width	Diameter: 13.24 in (33.6 cm)	Diameter: 22 in (55.9 cm)	W x L: 22 x 16 in (55.9 x 40.6 cm)
Color	Tan or Gray	Gray	Gray
Mounting	2 in (50.8 mm) OD Mast / Eyebolts	Eybolts	Bracket / Eyebolts
Application	Indoor or Outdoor	Indoor	Indoor / Outdoor
Termination	8 ft. (2.4 m) Conduit, Copper Conductors	Terminals	Terminals
Environmental	Operating Temperature: -4 to 140 °F (-20 to 60 °C); Relative Humidity: 0% to 95% (non-condensing)		
	Speaker Head: Outdoor operating temperature: -40 °F to 140 °F (-40 °C to +60 °C)		
	ECC (without heater/cooling system):		
	Indoor operating temperature: +32 °F to +120 °F (0 °C to 49 °C); Humidity: 0% to 95% (non-condensing)		
Electronics Control Cabinet			
Dimensions	70 x 30 x 12 in (177.8 x 76.2 x 30.5 cm)		
Weight (without batteries)	242 lb (109.8 kg)		

## Ordering Information

### Extended Warranties

MN-HSMP650EXWARR2	Hyperspike Series 650 Class extended warrant - 2 years total. Must be ordered when MPSA is ordered
MN-HSMP650EXWARR2	HS Medium Power Loudspeaker with ECC extended warranty - 2 years total. Must be ordered when unit is ordered.

### Demo Units

MN-HSMP200DEMO1	Hyperspike Series Medium Power 200 Watt Indoor/Outdoor directional (60x30 degree) loudspeaker demonstration kit. Comes with Hyperspike Series 200 Watt Directional (60x30 degree) loudspeaker, Amplifier, MP3 player, Speaker cable, Line-in cable, and Transit case. This product is to be used for demonstration purposes only and is not available for resale.
MN-HSMPDF300DEMO1	Hyperspike Series Medium Power 300 Watt Omni-directional loudspeaker demonstration kit. Comes with Hyperspike Series Omni-directional loudspeaker, Amplifier, MP3 player, Speaker cable, Line-in cable, and Transit case. This product is to be used for demonstration purposes only and is not available for resale.
MN-HSMP650DFDEMO1	Hyperspike Series Medium Power 650 Watt Omni-directional loudspeaker demonstration kit. Comes with Hyperspike Series Omni-directional loudspeaker, Amplifier, MP3 player, Speaker cable, Line-in cable, and Transit case. This product is to be used for demonstration purposes only and is not available for resale.

### Medium Power

MN-HSMP200D1	Hyperspike Series Interior Building 200 Watt Directional (60x30 degree) loudspeaker. With mounting bracket.
MN-HSMP200D170	Hyperspike Series Indoor/Outdoor Building 200 Watt Directional (60x30 degree) loudspeaker with internal 70.7 VRMS transformer and blocking capacitor. With mounting bracket.
MN-HSMP300DF1	Hyperspike Series Medium Power 300 Watt Indoor-only Omni-directional loudspeaker assembly. Eyebolt mount.
MN-HSMP300DF170	Hyperspike Series Medium Power 300 Watt Indoor-only Omni-directional loudspeaker assembly with internal 70.7 VRMS transformer and blocking capacitor. Eyebolt mount.
MN-HSMP650G	Hyperspike Series Medium Power 650 Watt Omni-directional loudspeaker assembly. Eye-bolt or 2" mast mount. Gray housing. Requires separate power amplifiers connected to EDWARDS audio system.
MN-HSMP650G70	Hyperspike Series Medium Power 650 Watt Series Omni-directional loudspeaker assembly with internal 70.7 VRMS transformer and blocking capacitor that is rated up to 250 Watts of audio power. Eye-bolt or 2" mast mount. Gray housing. Requires separate power amplifiers connected to EDWARDS audio system.
MN-HSMP650P5GAC	EDWARDS System-based 650 Watt Omni-directional HPSA Assembly (5 of 5 Active Panels) with lockable NEMA 4 amplifier and electronics enclosure. 110V/60Hz operation only. Enclosure equipped with tamper switch. EDWARDS hard-wire interface included. Accessories are ordered separately. Gray colored speaker head. Eyebolt or 2" OD mast mount.
MN-HSMP650E5G	Gray EDWARDS System-based 650 Watt Omni-directional HPSA Assembly (5 of 5 Active Panels) with lockable NEMA 4 amplifier, 110V/60 Hz inverter/battery charger and electronics enclosure, lockable NEMA 4 battery enclosure (w/o batteries). Enclosures equipped with tamper switches. AC powered amplifier with DC backup.
MN-HSMP650E5T	Tan EDWARDS hard-wire interface included. Batteries and accessories are ordered separately. Eyebolt mount (hanging) or 2" OD mast mount.
MN-HSMP650P5T	Hyperspike Series Medium Power 650 Watt Omni-directional loudspeaker assembly. Eye-bolt or 2" mast mount. Tan housing. Requires separate power amplifiers connected to EDWARDS audio system.
MN-HSMP650T70	Hyperspike Series Medium Power 650 Watt Omni-directional loudspeaker assembly with internal 70.7 VRMS transformer and blocking capacitor. Eye-bolt or 2" mast mount. Tan housing. Requires separate power amplifiers connected to EDWARDS audio system.

### Modeling Services

MN-HSEMD12	Hyperspike Series EASE modeling exterior direct/reflected energy. Up to (12) 3D buildings overlaid on Google earth map or provided PDF/CAD site topology drawing. Modeling based on 125-2Khz band and provide medium resolution graphics with 3dB steps in propagation for up to (6) acoustic device/array locations onto chloropleth map. Scale limit of this offer is for 4 million square feet venue.
MN-HSEMDNB	Hyperspike Series EASE modeling exterior direct energy only (no 3D buildings) overlaid on Google earth map or on provided PDF/CAD site topology drawing. Modeling based on 125-2Khz band and provide medium resolution graphics with 3dB steps in propagation or up to (4) acoustic device/array locations onto chloropleth map. Scale limit of this service is in 2 million square feet increments.
MNHSEMDQ	Hyperspike Series Ease modeling exterior direct/reflected energy. Over 12 3D buildings overlaid on Google earth map or provided PDF/CAD site topology drawing. Modeling based on 125-2Khz band and provide medium resolution graphics with 3dB steps in propagation for system required acoustic device/array locations onto chloropleth map. Contact EDWARDS Customer Service for quote.
MN-HSEMN12	Hyperspike Series EASE modeling interior direct/reflected energy. Up to (12) interior 3D substructures overlaid on provided PDF/CAD plan view drawing. Modeling based on 125-2Khz band and provide medium resolution graphics with 3dB steps in propagation for up to (10) acoustic device/array locations onto chloropleth map. Scale limit of this offer is for 250,000 square foot venue.
MN-HSEMN24	Hyperspike Series EASE modeling interior direct/reflected energy. Up to (24) interior 3D substructures overlaid on provided PDF/CAD plan view drawing. Modeling based on 125-2Khz band and provide medium resolution graphics with 3dB steps in propagation for up to (16) acoustic device/array locations onto chloropleth map. Scale limit of this offer is for 500,000 square foot venue.
MN-HSEMNO	Hyperspike Series EASE modeling interior direct/reflected energy. Over 24 interior 3D substructures overlaid on provided PDF/CAD plan view drawing. Modeling based on 125-2Khz band and provide medium resolution graphics with 3db steps in propagation for up to system required acoustic device/array locations onto chloropleth map. Contact EDWARDS customer service for quote.

### Accessories, spare parts

MN-AUDSOF1	Hyperspike Series audio optimization software package
MN-HSACNB2K	Hyperspike Series AC Power Only ECC (no battery backup or inverter)
MN-HSAMPCL16	Hyperspike Series ECC replacement 120 VAC power amplifier and mated compression/limiter mounted in mini-rack for ECC for MN-HS16 or MN-HSMP650 Series
MN-HSBATT140	Hyperspike Series ECC Standard Battery set. 140 AH SLA. 2 batteries required for each ECC. Replace in pairs.
MN-HSBHK1S	Hyperspike Series Battery compliment heating blankets (set of 2). 120 VAC. Requires MN-HSECCH1. Two used for MN-HS64 Series.
MN-HSBHK1X	Hyperspike Series Battery compliment heating blankets (set of 2) for use with MN-HSBX1 Extended Battery Enclosure. 120 VAC. Requires MN-HSECCH1.
MN-HSBX1	Hyperspike Series ECC Battery Extension enclosure (without batteries). Includes tamper switch, battery shelf and cabling. Can be mounted to the side or below the ECC primary battery enclosure.
MN-HSCUST1	Hyperspike Series Custom work - Contact EDWARDS Customer Services
MN-HSDCECC2K	Hyperspike Series DC Powered Amplifier ECC
MN-HSECC1	MN-HS16 or MN-HSMP650 Class lockable NEMA 4 amplifier, 110V/60Hz. inverter/battery charger and electronics enclosure, lockable NEMA 4 battery enclosure (w/o batteries). Enclosures equipped with tamper switches. AC powered amplifier with DC backup. Batteries and accessories are ordered separately.
MN-HSECCACB20	Hyperspike Series ECC Replacement AC Circuit breaker - 20 Amp
MN-HSECCACB30	Hyperspike Series ECC Replacement AC Circuit breaker - 30 Amp
MN-HSECCDCB1	Hyperspike Series ECC replacement DC Circuit breaker with mounting hardware
MN-HSECCDM1	Hyperspike Series ECC Replacement inverter display module
MN-HSECCDPK1	Hyperspike Series ECC Door replacement pin and E-clip kit (8 pins and 8 clips)
MN-HSECCFAN1	Hyperspike Series ECC Top-mount ventilation fan system with side louvers. 115 VAC. Changes ECC rating to NEMA 3R
MN-HSECCH1	Hyperspike Series ECC Cabinet heater system kit (120 VAC). Provides terminals for battery heater blanket kits. One used for MN-HS16, MN-HSMP650 or MN-HS32 Series. Two used for MN-HS64 Series.
MN-HSECCLD	Hyperspike Series ECC Replacement lower door. One used for MN-HS16 & MN-HS32 Series. Two used for MN-HS64 Series.
MN-HSECCPED1	Hyperspike Series ECC Housekeeping Pedestal Mount Kit (4"). Used when wall-mounting MN-HS16, MN-HSMP650 or MN-HS32 Series ECC. 2 required if wall-mounting MN-HS64 Series ECCs.
MN-HSECCPM1	Hyperspike Series ECC pole-mount installation kit. For use with MN-HS16 & MN-HS32 Series only.
MN-HSECCUD	Hyperspike Series ECC Replacement upper door. One used for MN-HS16 & MN-HS32 Series. Two used for MN-HS64 Series.
MN-HSLPMK1	Hyperspike Series Emitter (loudspeaker) pole-mount kit. Bolts to steel or wooden pole. Additional support and guy wires may be necessary.
MN-HSMPECCCM	MN-HSMP650 Class lockable NEMA 4 amplifier, 110V/60Hz. Inverter/battery charger and electronics enclosure, lockable NEMA 4 battery enclosure (w/o batteries). Enclosures equipped with tamper switches. AC powered amplifier with DC backup. Batteries and accessories are ordered separately.
MN-HSPAXFM1	Hyperspike Series ECC Replacement pre-amp audio isolation transformer module
MN-HSPM16	Hyperspike Series portable tripod mast. Extends up to 16'
MN-HSPM33	Hyperspike Series Portable mast & guy wire unit. Extends up to a maximum 33' (10M)
MN-HSPWR110	Hyperspike Series Replacement 24VDC/120VAC charger/inverter module
MN-HSRPLKEY1	Hyperspike Series replacement key set (2 keys)
MN-HSSOLAR1	Hyperspike Series Solar Array System, 300 Watt. Includes power equalizer. Used with MN-HSDCECC2K
MN-HSSOLAR2	Hyperspike Series Solar Array System, 600 Watt. Includes power equalizer. Used with MN-Hyperspike Series ECC
MN-HSSPKR1	Hyperspike Series replacement individual loudspeaker
MN-HSTEP1	Heavy duty foldable tripod with 3ft extension and carrying bag. Suggested use with 1600 watt HPSA or 650 watt MPSA demonstration kits. Not to be used with 3200 watt or 6400 watt systems.
MN-HSTPMS1	Hyperspike Series Emitter (loudspeaker) tripod mounting system. 10' tripod with 14' mast. Additional support and guy wires may be necessary. ECC cannot be mounted to this unit.
MN-HSWB1	Hyperspike Series Emitter head (loudspeaker) wall-mount bracket & installation kit
MN-TP1201P	TP Series 120V AC line transient protector module
MN-TP120STD	TP Series 120V circuit transient protector module
MN-TP24STD	TP Series 24V circuit transient protector module
MN-TP90STD	TP Series 90V circuit transient protector module
MN-TPBLK1	TP Series Single circuit breaker lockout kit
MN-TPRJ31STD	TP Series RJ31 transient protector module
MN-TPRJ45STD	TP Series RJ45 transient protector module
MN-VR241	Hyperspike Series DC Sensitive Supervision Relay