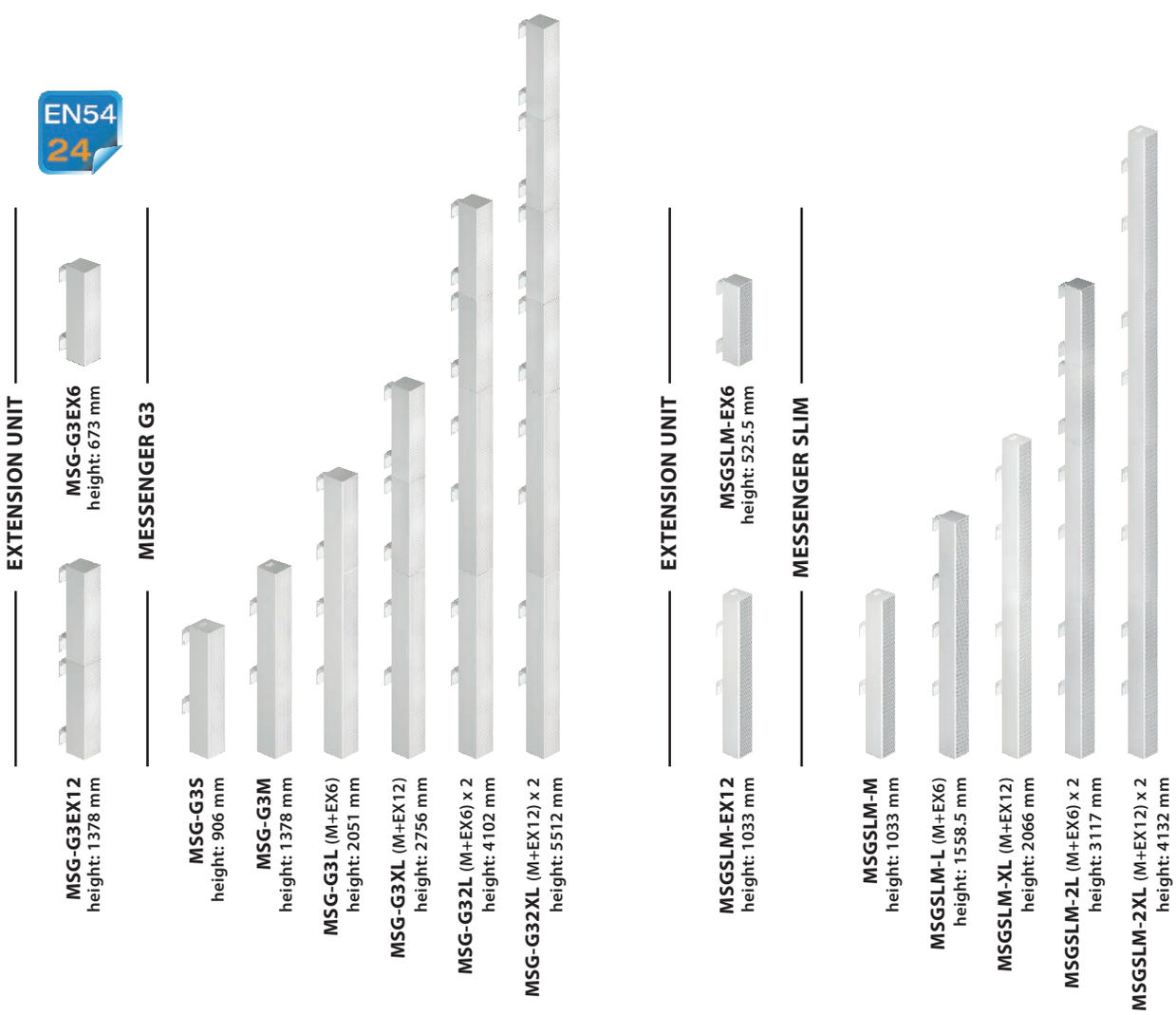
MESSENGER G3/SLIM

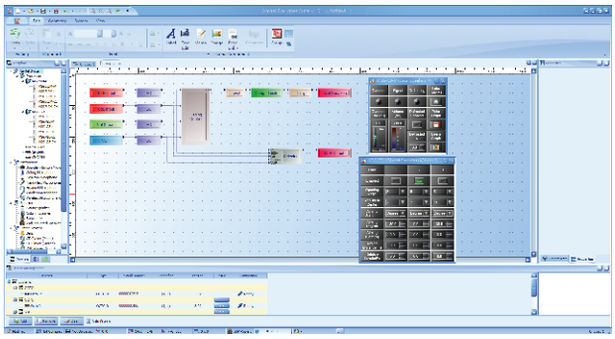
The MESSENGER G3 line array has a very tightly controlled beam and signal pattern (stays within 3 dB from 5m to 100m) for 8/12 Class-D amplifier channels (assemble separate arrays to longer one which for 18/24/36/48 amplifier channels), and can be shaped for specific applications or environments which requiring symmetrical, asymmetrical, single, dual or triple lobe designs. The MESSENGER G3 is equipped with one mic/line, speech and background music, and can be separately adapted for optimum performance. The BGM function has sound directivity and high-quality music also enhances the low frequency performance of the MESSENGER G3. For speech mode, there will be 3 standard filters available for quick setup, in more demanding situations, the intelligibility can be fine tuned manually. The TI DSP chipset and a sampling rate of 48 kHz ensure a wide frequency response, up to 22 kHz for high fidelity sound and an impressive low frequency response. With the patented algorithm and the side lobe free suppression for speech reinforcement, making the MESSENGER G3 a fully versatile steerable line array which meets the demands of today's market for pro-sound and speech reinforcement. The MESSENGER G3 is entirely software controlled. The lobe control and variable acoustical centre can compensate for architectural requirements and accommodate various 1.2m ~ 4m mounting heights.

FEATURES

- Even sound level in the coverage area
- The extension units makes demo transportation and installation easier
- Triple-lobe feature for the ultimate accuracy in lobe design
- Beam steering ±45 degrees
- Designed for high quality speech and BGM applications in reverberant acoustic environments
- Variable vertical dispersion controllable between 45 and 5 degrees
- Variable acoustic centre in 9 steps (from asymmetrical to symmetrical)
- The asymmetrical lobe has the ability to keep the sound deviation within 3 dB from 5m to 100m
- Can be interfaced with 100V line system
- Integrated DSP control with 8 band PEQ, delay and compressor limiter
- 24VDC input for battery backup with optional charger
- Support EASE GLL for room acoustic simulations
- Streaming audio and data transmission via Ethernet
- Streaming with other equipments by ATEÏS-Net
- Intuitive 3D simulation by ATEÏS Designer Suite software
- 20 kHz tone for mic/line and 100V/70V input monitoring



ATEÏS DESIGNER SUITE SOFTWARE



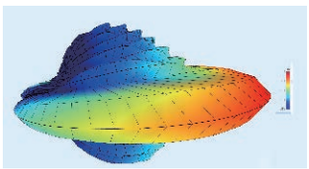
DSP PROCESSING

- Component: Input, Output, PEQ, Ethernet IGMP, Audio Stream, VoIP, Receive, Compress Limiter, Selector, Delay, Level Control
- Delay: 1 ~ 1,000 ms
- Equalizing: 8 bands PEQ
- Compress limiter: Level adjustable
- Mute: audio on/off
- Audio Indicators: Signal/Overload/Surveilling
- Input signal surveillance
- Input line detection: 20 kHz, 18 kHz and 20 kHz standard on-board surveillance
- The Deforesting function avoids the icing of the drum paper and makes the output abnormal

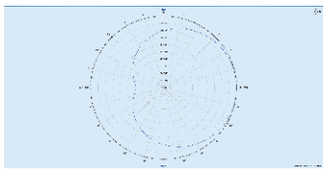
ATEÏS Designer Suite allows to control the lobe shaping, and the acoustical centre can be moved over the array to match and compensate in relation to any installation.

LOBE SHAPING BY ATEÏS DESIGNER SUITE

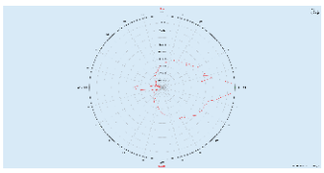
The acoustical centre of the array can be adjusted to match exactly for the acoustic requirements of the installation, the mounting height and other environmental needs. Each driver centre of the array is separately powered and processed, therefore, all the lobe shape variations between a symmetrical and an asymmetrical arrangement can be made with the simple selection of combo-box in the ATEÏS Designer Suite software.



3D Dispersion Model



Horizontal Dispersion

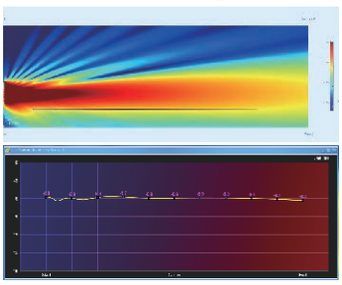


Vertical Dispersion

DIRECTIONAL ACTIVE DSP ARRAY SYSTEM

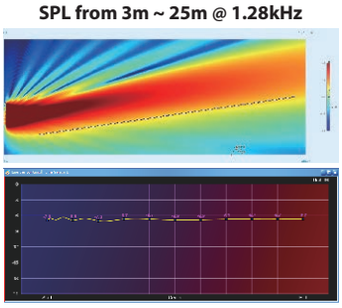
- Ear level at 1.8m height

SPL from 3m ~ 25m @ 1.28kHz



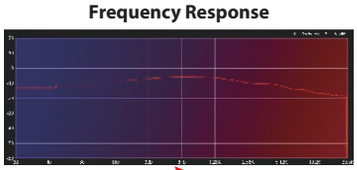
- For stepped seating applications

SPL from 3m ~ 25m @ 1.28kHz

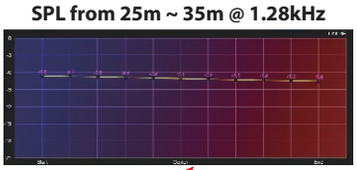


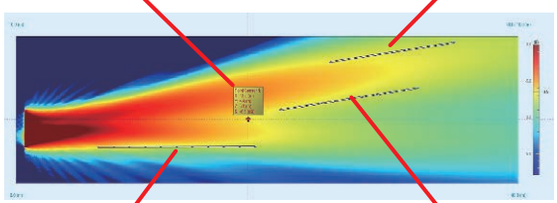
- For balcony seating applications

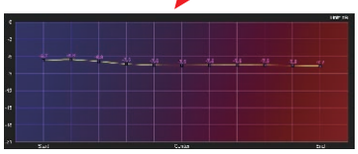
Frequency Response



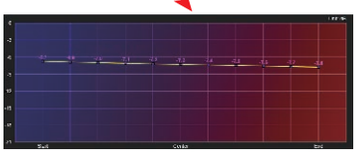
SPL from 25m ~ 35m @ 1.28kHz







SPL from 6.5m ~ 19m @ 1.28kHz

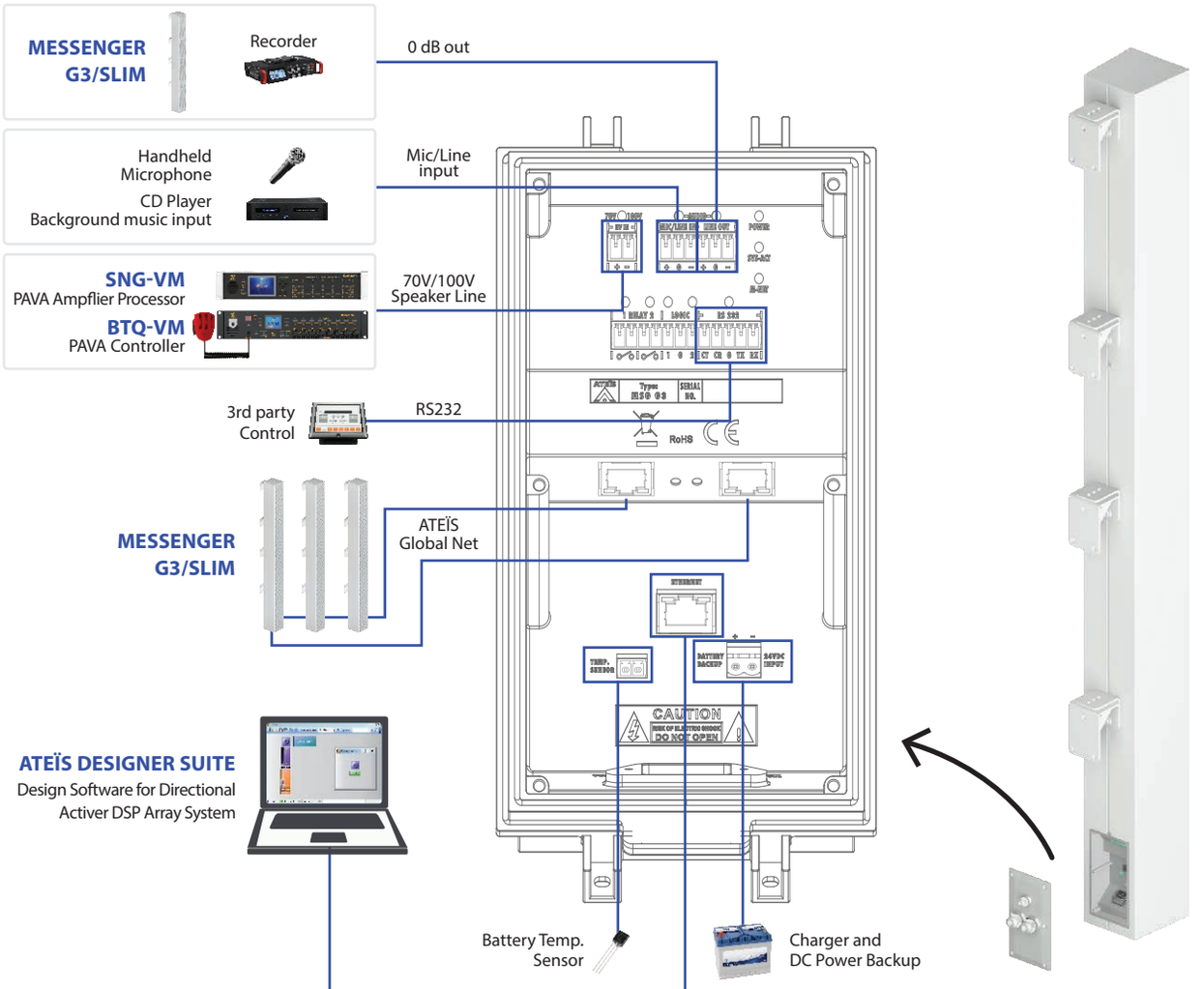


SPL from 21m ~ 32m @ 1.28kHz

MESSENGER G3
MESSENGER SLIM

Side-Lobe-Free Steerable Digital Line Array

SYSTEM DIAGRAM



SNG-VM/PR/AM

PA/VA Modular Processor

TERRAMANAGER

Custom GUI Control and Monitoring

TERRA-K

IP Paging and Intercom Console

TERRASERVER

Integrated Management Software

TERRACOM II

Audio and Control over IP

BOUTIQUE

Compact and Self-Amplified PA/VA System

IDA8

Highly Integrated Network PA/VA System

UAP G3

Universal Audio Processor

ETH-DNM

Digital Ambient Noise Sensing Mic

SCHOOL SOUND SYSTEM

IP Classroom Sound and Intercom

TECHNICAL SPECIFICATIONS

ELECTRICAL

• AC power input: 100 ~ 240 VAC • DC power input: 21.6 ~ 28 VDC

Power consumption	AC power		DC power	
	Max	Standby mode	Max	Standby mode
MSG-G3S	167W	25W	160W	22W
MSG-G3M	211W	27.5W	201W	24.5W
MSG-G3L	277W	30W	263W	27W
MSG-G3XL	343W	32.5W	326W	29.5W
MSG-G32L	554W	35W	526W	32W
MSG-G32XL	686W	37.5W	653W	34.5W

• AC power input: 100 ~ 240 VAC • DC power input: 21.6 ~ 28 VDC

Power consumption	AC power		DC power	
	Max	Standby mode	Max	Standby mode
MSGSLM-M	211W	27.5W	201W	24.5W
MSGSLM-L	277W	30W	263W	27W
MSGSLM-XL	343W	32.5W	326W	29.5W
MSGSLM-2L	554W	35W	526W	32W
MSGSLM-2XL	686W	37.5W	653W	34.5W

MECHANICAL

• Mounting: 1 set of wall bracket
• Color: RAL9016

Model	Dimensions (W x D x H)
MSG-G3S	167 x 178 x 906 mm
MSG-G3M	167 x 178 x 1378 mm
MSG-G3L	167 x 178 x 2051 mm, MSG-G3M + MSG-G3EX6
MSG-G3XL	167 x 178 x 2756 mm, MSG-G3M + MSG-G3EX12
MSG-G32L	167 x 178 x 4102 mm, (MSG-G3M + MSG-G3EX6) x 2
MSG-G32XL	167 x 178 x 5512 mm, (MSG-G3M + MSG-G3EX12) x 2
MSG-G3EX6	167 x 178 x 673 mm
MSG-G3EX12	167 x 178 x 1378 mm
MSGSLM-M	128 x 139 x 1033 mm
MSGSLM-L	128 x 139 x 1558.5 mm, MSGSLM-M + MSGSLM-EX6
MSGSLM-XL	128 x 139 x 2066 mm, MSGSLM3-M + MSGSLM-EX12
MSGSLM-2L	128 x 139 x 3117 mm, (MSGSLM-M + MSGSLM-EX6) x 2
MSGSLM-2XL	128 x 139 x 4132 mm, (MSGSLM-M + MSGSLM-EX12) x 2
MSGSLM-EX6	128 x 139 x 525.5 mm
MSGSLM-EX12	128 x 139 x 1033 mm

ORDERING INFORMATION

Model No.	Step 1	Step 2	Step 3	Description of model
MESSENGER G3				
MSG-G3S	ATEÏS Loop Netcard	Battery Charger	70V or 100V Line Transformer	Digital Steerable Line Array G3,8 Drv
MSG-G3M				Digital Steerable Line Array G3,12 Drv
MSG-G3L				Digital Steerable Line Array G3,18 Drv
MSG-G3XL				Digital Steerable Line Array G3,24 Drv
MSG-G32L				Digital Steerable Line Array G3,Lx2
MSG-G32XL				Digital Steerable Line Array G3,XLx2
MESSENGER SLIM				
MSGSLM-M	ATEÏS Loop Netcard	Battery Charger	70V or 100V Line Transformer	Digital Steerable Line Array SLIM, 12 Drv
MSGSLM-L				Digital Steerable Line Array SLIM, 18 Drv
MSGSLM-XL				Digital Steerable Line Array SLIM, 24 Drv
MSGSLM-2L				Digital Steerable Line Array SLIM, L x 2
MSGSLM-2XL				Digital Steerable Line Array SLIM, XL x 2
ATEÏS Loop Netcard				
				None
	RR			RJ45(A)-(B)
	MR			Fiber Multi Mode(A)-RJ45(B)
	SR			Fiber Single Mode(A)-RJ45(B)
	RM			RJ45(A)-Fiber Multi Mode(B)
	RS			RJ45(A)-Fiber Single Mode(B)
	MM			Fiber Multi Mode(A)-(B)
	SS			Fiber Single Mode(A)-(B)
Battery Charger				
				None
		C		Charger
70V or 100V Line Transformer				
				None
			T	100V
			T7	70V

Model No.	Step	Description of model
Extension Unit		
MSG-G3EX6	70V or 100V Line Transformer	MSG-G3 Extension Unit, 6 Drv
MSG-G3EX12		MSG-G3 Extension Unit, 12 Drv
MSGSLM-EX6		MSGSLM Extension Unit, 6 Drv
MSGSLM-EX12		MSGSLM Extension Unit, 12 Drv
70V or 100V Line Transformer		
		None
	T	100V
	T7	70V

AUDIO CHARACTERISTICS

- A/D-D/A bit resolution: 24 bit
- Sampling rate: 48 kHz
- Internal processing: 32 bit (floating points)
- Frequency response: 100 ~ 22 kHz
- Max. SPL: 93 dBa ±1 dB
- Max. input/output level: 6 dBu
- Input impedance (balanced): 10k ohm
- Output impedance (balanced): 90 ohm

MECHANICAL

- Coverage angle
  - Vertical: 5, 7, 10, 15, 20, 25, 30, 35, 40, 45 degree
  - Horizontal: 145 degree (for all units)
- Lobe shaping (centered on driver): 1, 4, 6, 9, 13, 16, 19, 21, 24
- Lobe steering: -45° to 45°
- Speaker type: 4.25" (dual-cone with inverted surround, weatherproof, aluminum)

ENVIRONMENTAL

- Operating temperature: -5 °C ~ +55 °C (+23 °F ~ +131 °F)
- Storage temperature: -40 °C ~ +70 °C (-40 °F ~ +158 °F)
- Relative humidity: 20% to 95%
- Air pressure: 600 to 1100 hPa
- Heat dissipation: 273 BTU

CERTIFICATIONS AND APPROVALS

Europe/UK	Voice Alarm System	EN 54-24
Europe	CE/EMI	EN 55032
Europe	CE/EMC	EN 55035
Europe	CE/LVD	EN 62368-1