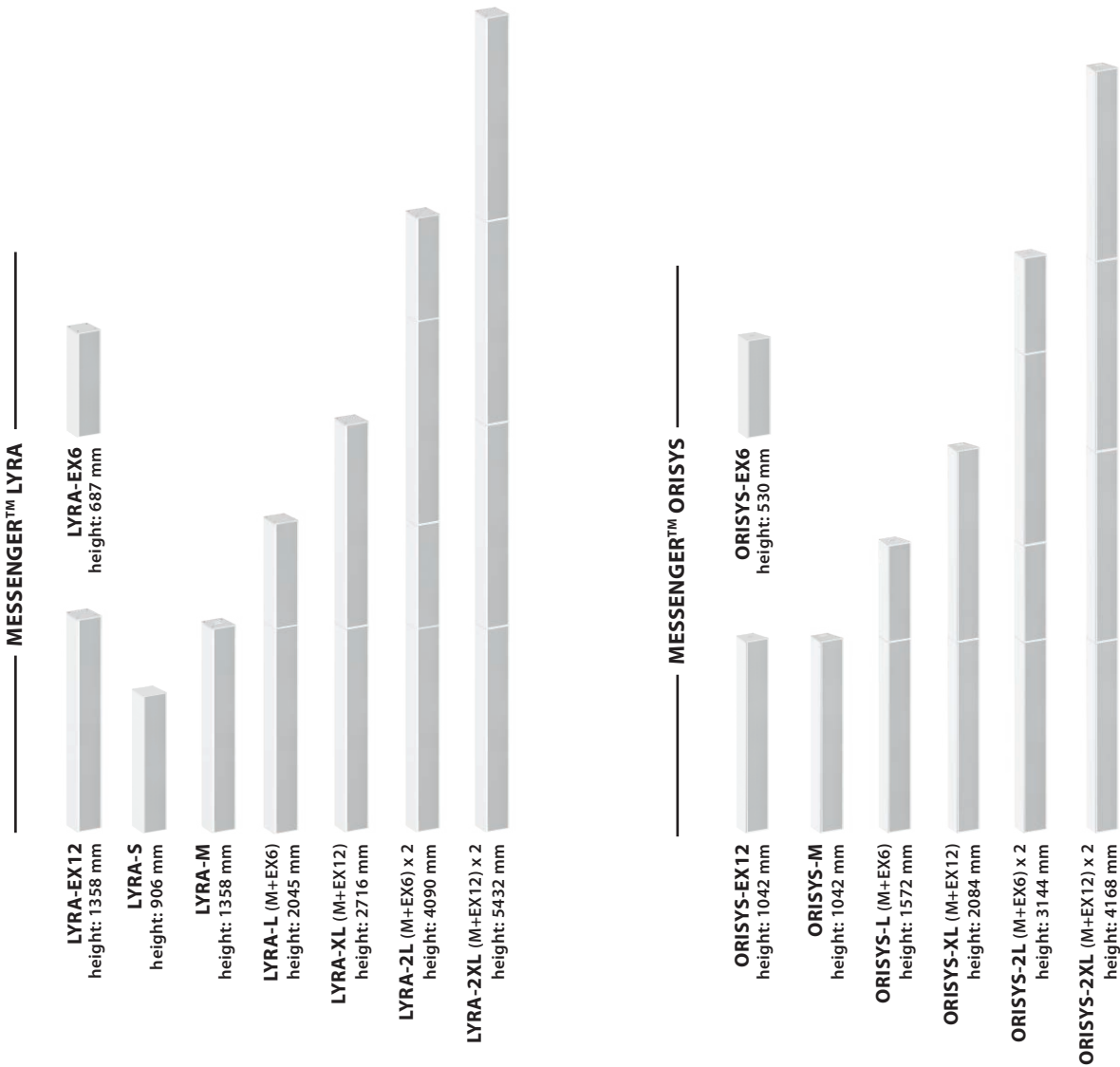


LYRA & ORISYS

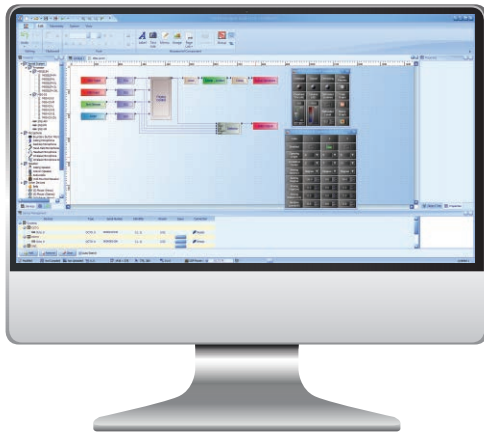
The LYRA & ORISYS are a compact, self-powered, digitally steerable line array designed to deliver clear speech and full-range music in large, acoustically demanding spaces. Using advanced beam-shaping technology, it maintains consistent sound levels across long distances while allowing precise control over coverage patterns. Built for both professional audio and life-safety applications, it integrates seamlessly with the ATEİS Designer Suite and TerraManager for configuration, monitoring, and networked control. With powerful DSP processing, low-frequency enhancement, and side-lobe suppression, the system ensures high intelligibility, fidelity, and reliability, making it suitable for future-proof installations.

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 ATEİS-Net
 - Intuitive 3D simulation by ATEİS Designer Suite software
 - 20 kHz tone for mic/line and 100V/70V input monitoring



ATEIS DESIGNER SUITE SOFTWARE



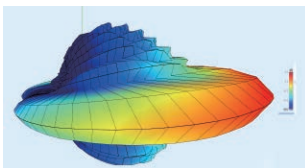
DSP PROCESSING

- 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

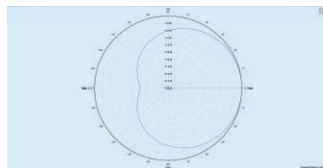
ATEIS Designer Suite allows to control the lobe shaping, and the acoustical centre can be moved over the array to match and compensate in relation to any installation.

LOBE SHAPING BY ATEIS DESIGNER SUITE

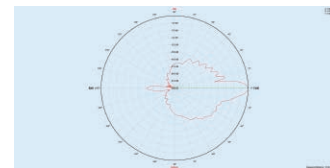
The acoustical centre of the array can be adjusted to match exactly for the acoustic requirements of the installation, the mounting height and other environmental needs. Each driver centre of the array is separately powered and processed, therefore, all the lobe shape variations between a symmetrical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



3D Dispersion Model



Horizontal Dispersion

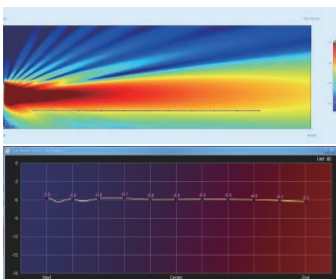


Vertical Dispersion

DIRECTIONAL ACTIVE DSP ARRAY SYSTEM

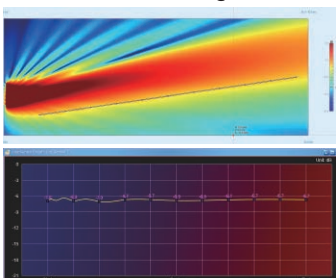
- Ear level at 1.8m height

SPL from 3m ~ 25m @ 1.28kHz



- For stepped seating applications

SPL from 3m ~ 25m @ 1.28kHz

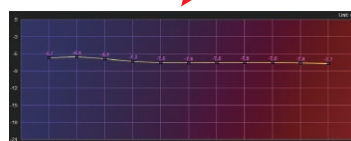
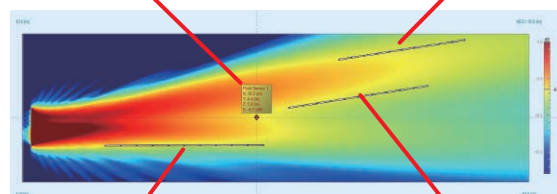
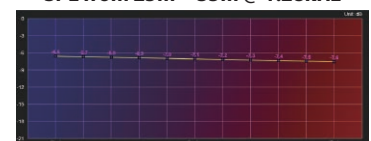


- For balcony seating applications

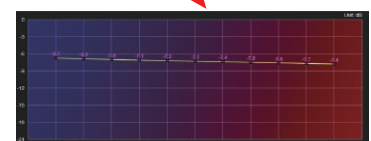
Frequency Response



SPL from 25m ~ 35m @ 1.28kHz

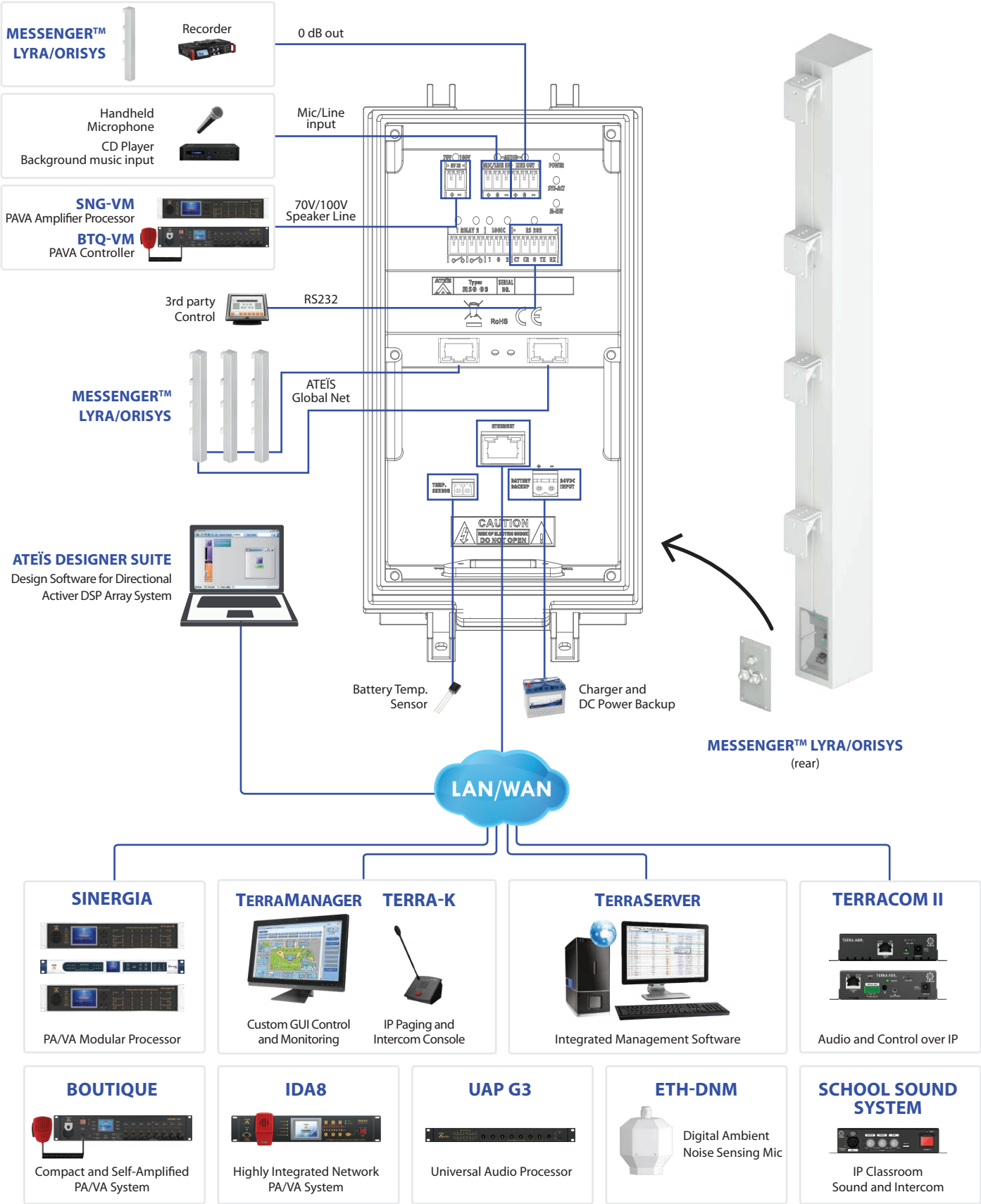


**SPL from 6.5m ~ 19m
@ 1.28kHz**



**SPL from 21m ~ 32m
@ 1.28kHz**

SYSTEM DIAGRAM



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
LYRA-S	170W	33W	145W	22W
LYRA-M	254W	38W	210W	25W
LYRA-L	373W	50W	310W	35W
LYRA-XL	500W	60W	415W	45W
LYRA-2L	746W	100W	620W	70W
LYRA-2XL	1000W	120W	830W	90W

- 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
ORISYS-M	113W	26W	93W	17W
ORISYS-L	160W	34W	135W	24W
ORISYS-XL	210W	40W	175W	28W
ORISYS-2L	320W	68W	270W	48W
ORISYS-2XL	420W	80W	350W	56W

MECHANICAL

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

Model	Dimensions (W x D x H)
LYRA-S	167 x 170 x 906 mm
LYRA-M	167 x 170 x 1378 mm
LYRA-L	167 x 170 x 2051 mm, LYRA-M + LYRA-EX6
LYRA-XL	167 x 170 x 2756 mm, LYRA-M + LYRA-EX12
LYRA-2L	167 x 170 x 4102 mm, (LYRA-M + LYRA-EX6) x 2
LYRA-2XL	167 x 170 x 5512 mm, (LYRA-M + LYRA-EX12) x 2
LYRA-EX6	167 x 170 x 673 mm
LYRA-EX12	167 x 170 x 1378 mm
ORISYS-M	142 x 128 x 1042 mm
ORISYS-L	142 x 128 x 1572 mm, ORISYS-M + ORISYS-EX6
ORISYS-XL	142 x 128 x 2084 mm, ORISYS-M + ORISYS-EX12
ORISYS-2L	142 x 128 x 3144 mm, (ORISYS-M + ORISYS-EX6) x 2
ORISYS-2XL	142 x 128 x 4168 mm, (ORISYS-M + ORISYS-EX12) x 2
ORISYS-EX6	142 x 128 x 530 mm
ORISYS-EX12	142 x 128 x 1042 mm

ORDERING INFORMATION

Model No.	Step 1	Step 2	Step 3	Description of model
MESSENGER G3				
LYRA-S	ATEİS Loop Netcard	Battery Charger	70V or 100V Line Transformer	Digital Steerable Line Array LYRA,8 Drv
LYRA-M				Digital Steerable Line Array LYRA,12 Drv
LYRA-L				Digital Steerable Line Array LYRA,18 Drv
LYRA-XL				Digital Steerable Line Array LYRA,24 Drv
LYRA-2L				Digital Steerable Line Array LYRA,Lx2
LYRA-2XL				Digital Steerable Line Array LYRA,XLx2
MESSENGER SLIM				
ORISYS-M	ATEİS Loop Netcard	Battery Charger	70V or 100V Line Transformer	Digital Steerable Line Array ORISYS, 12 Drv
ORISYS-L				Digital Steerable Line Array ORISYS, 18 Drv
ORISYS-XL				Digital Steerable Line Array ORISYS, 24 Drv
ORISYS-2L				Digital Steerable Line Array ORISYS, L x 2
ORISYS-2XL				Digital Steerable Line Array ORISYS, XL x 2
ATEİS 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		
LYRA-EX6	70V or 100V Line Transformer	LYRA Extension Unit, 6 Drv
LYRA-EX12		LYRA Extension Unit, 12 Drv
ORISYS-EX6		ORISYS Extension Unit, 6 Drv
ORISYS-EX12		ORISYS 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)
- IP-rating: 21

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