



ATLAS + FYNE

# FS-4T

## SURFACE MOUNT LOUDSPEAKER

### TECHNICAL DATA SHEET



### PRODUCT SUMMARY

The IsoFlare™ FS-4T is a wide bandwidth, high sensitivity 4" surface mount loudspeaker designed for the ultimate in fidelity, coverage, and aesthetics.

The IsoFlare™ FS range is the new benchmark in point source technology for prestigious commercial environments. Decades of experience from acoustic and mechanical engineers specializing in this technology have honed existing skills, complemented with the very latest in design & engineering techniques to bring IsoFlare™ to the premium commercial space in an integrated package.

Unlike standard discreet and 'coax' offerings, the IsoFlare™ driver exhibits excellent harmonic alignment between HF and LF sources, the effect of which is to deliver accurate and natural reproduction with superb tonal balance, ensuring seamless integration in any environment with any combination of IsoFlare™ surface-mount, in-ceiling, or pendant formats.

Propagating a spherical wavefront, homogeneously aligned on all axes, the IsoFlare™ point source driver yields an even response throughout the listening area; a constant time delay over the entire frequency spectrum providing exceptional off-axis performance.

Safe and effective Installation of the FS-4T is made simple by way of the included slip free yoke mount, optional universal mount, or compatibility with 3rd party VESA mounts.

Equipped with an extremely low insertion loss 30W transformer for 70V or 100V distributed applications, wattage tap selection and low impedance bypass is easily configurable via a rear mounted slide selector switch with security cover.

For the most discerning designers and integrators, a complete suite of EASE™ (including compatibility with EASE Focus), CF2, 3D CAD, and BIM/Revit families are available for download at [AtlasIED.com](http://AtlasIED.com).

### KEY FEATURES

- Minimalistic and clean industrial design for sensitive architectural constraints.
- Same consistent voicing, and measured performance across all IsoFlare™ Series products whether Ceiling, Surface, or Pendant mount.
- High impact ABS enclosure with UV inhibitor.
- Corrosion-resistant, powder coated, aluminum grille for long term durability.
- IP65 rated
- Ferrofluid cooled titanium HF with neodymium magnet system.
- Weather treated multi fiber cone; stiffness combined with controlled top end roll off, for an accurate midrange.
- Fluted Surround Technology – Conventional driver surround profiles can reflect energy back down the cone causing coloration.
- Optimized smooth transition baffle (no sharp edges which cause diffraction).
- Slip-Free yoke mount supplied. Optional pan and tilt bracket. Compatible with VESA™ mounts.
- Full bandwidth very low insertion loss 30W 70/100V transformer.
- High-current premium crossover components (Air Core Inductors & Polypropylene Capacitors).
- Easy Access Tap Selector Switch.
- Enhanced voicing presets available via AtlasIED Atmosphere platform.

### APPLICATIONS

- Airports, Convention Centers, Hotels
- Casinos
- Houses of Worship
- Premium Retail Outlets, Shopping Malls
- Museums
- Premium Lounges / Bars
- Sports Facilities
- Health Clubs
- Performing Arts Centers
- Education Facilities
- Cruise Ships
- Courtrooms
- Multizone Foreground Music & Paging Systems
- Boardrooms & Corporate Offices

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### AUDIO SPECIFICATIONS / PERFORMANCE

SYSTEM	FS-4T
Type	Two-Way, Full Range, Surface Mount Loudspeaker
Frequency Range (-10dB) <sup>1</sup>	63Hz <sup>6</sup> - 30kHz
Frequency Response (+/- 3dB) <sup>1</sup>	83Hz - 22kHz
System Sensitivity (1W @ 1m) <sup>2</sup>	87dB
Nominal Coverage Angle (-6dB)	115° Conical

#### POWER HANDLING<sup>3</sup>

Average	60W
Programme	120W
Peak	240W
Recommended Amplifier Power	120W @ 8 Ohms
Nominal Impedance	8 Ohms

#### RATED MAXIMUM SPL<sup>4</sup>

Average	105dB
Peak	111dB
With Max. Transformer Tap - Average	102dB
Transformer Taps	30W, 15W, 7.5W, 3.8W ( 1.9W 70V) & Low Z operation
Directivity Index (dB)	6.1

#### TRANSDUCERS

IsoFlare™ Point Source Driver	
Low Frequency	4" (100mm) Bass/Mid, Multi-Fiber treated paper
High Frequency	0.75" (19mm) titanium dome with neodymium magnet system, Ferrofluid cooled

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### AUDIO SPECIFICATIONS / PERFORMANCE (CONTINUED)

#### PHYSICAL

Enclosure	High Impact ABS UL-V0
Grill Material	Aluminium, Powder Coated
Connectors	Euroblock with screw connections and loop output
Ingress Protection	IP65
Operating Temperature	-40°F to 140°F (-40° C to 60° C)
Environmental Testing	Conforms to MIL-STD-810 for salt spray & humidity
Included Accessories	Slip Free U-Bracket
Optional Accessories	Pan & Tilt Bracket (AS-U-B/AS-U-W)
Packed Quantity	2
Product Dimensions (HxWxD)	10.9" x 6.88" x 8.07" (277mm x 175mm x 205mm)
Shipping Dimensions (HxWxD)	19.3" x 19.3" x 10.2" (490mm x 490mm x 259mm)
Net Weight - (per unit)	7.72lbs (3.5kg)
Shipping Weight	23.28lbs (10.56kg)

#### Notes:

- 1 - Average over stated bandwidth, full space
- 2 - Unweighted pink noise input, measured at 1 meter on axis
- 3 - Long term power handling capacity as defined in EIA - 426B test

- 4 - Calculated from rated noise power and sensitivity
- 5 - 1k-10kHz average
- 6 - Recommended High-Pass (24dB/Oct)

A full range of measurements, performance data, Ease™ and CLF Data can be downloaded from [www.atlasied.com](http://www.atlasied.com).

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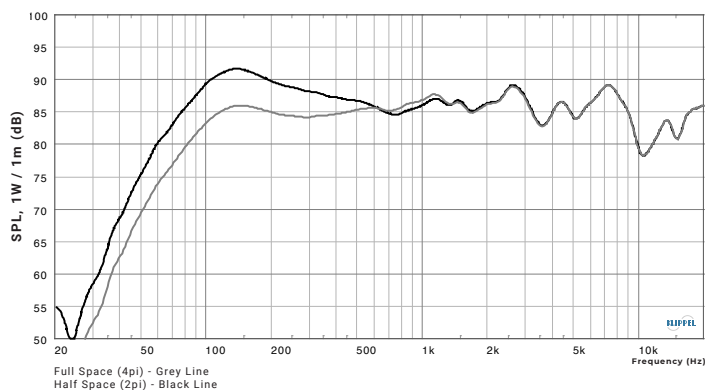
### TECHNICAL DATA SHEET



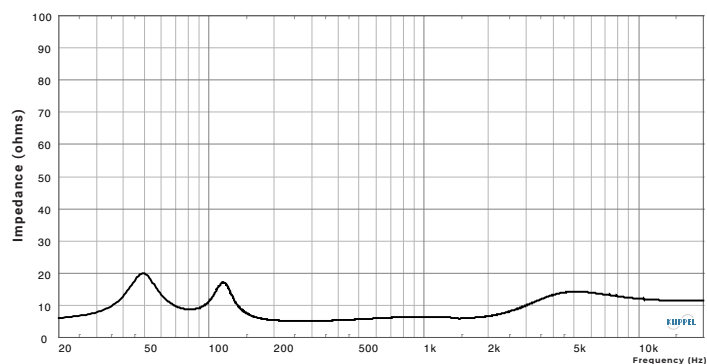
### PERFORMANCE MEASUREMENTS



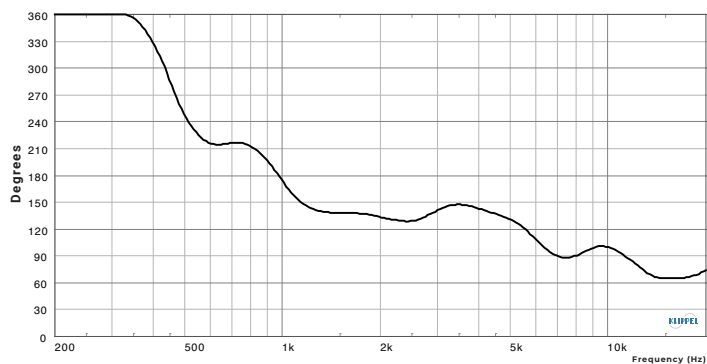
1m On-axis Frequency Response



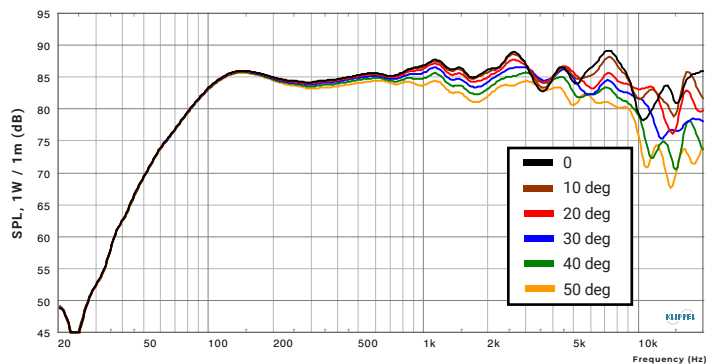
Impedance vs Frequency



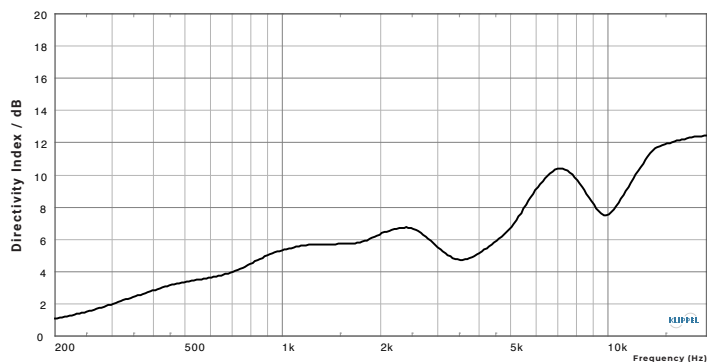
Beamwidth



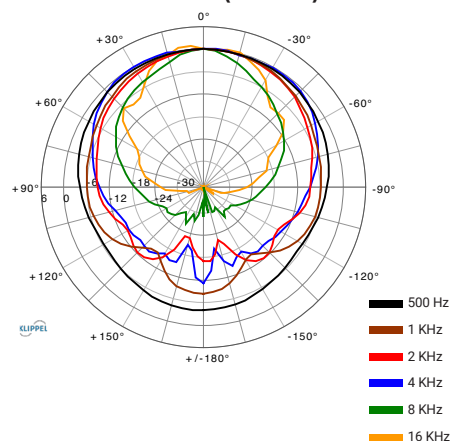
Frequency Response



DIRECTIVITY INDEX



Polar Plots (Octave)



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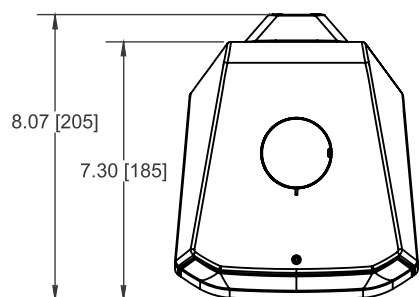
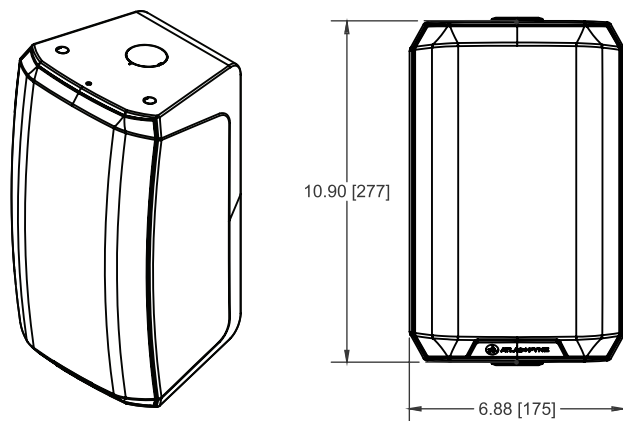


### DIMENSIONAL DRAWINGS

#### PRODUCT DIMENSIONS

##### Without Bracket

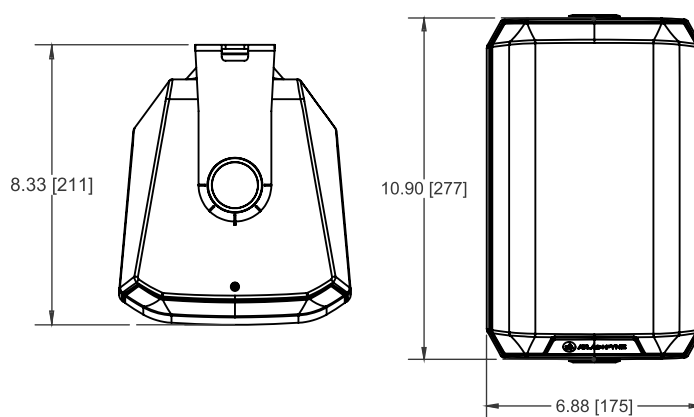
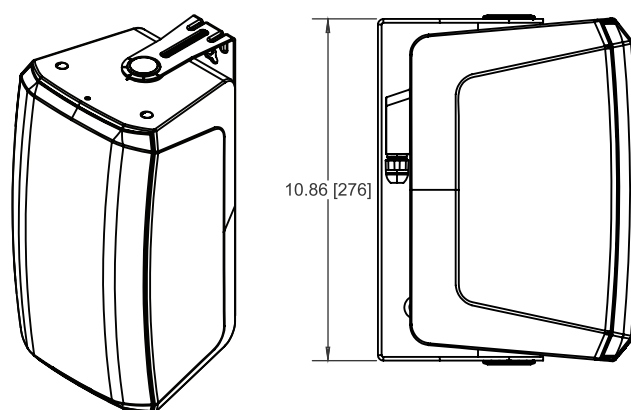
Height	10.90" (277mm)
Width	6.88" (175mm)
Depth	8.07" (205mm)



#### PRODUCT DIMENSIONS

##### With Bracket

Height	10.90" (277mm)
Width	6.88" (175mm)
Depth	8.33" (211mm)



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### ARCHITECT & ENGINEER SPECIFICATIONS

The loudspeaker shall be of a two-way surface-mount design with an internal passive crossover and a 30W low insertion loss 70/100V transformer for use in constant voltage distributed lines. A 4" mineral loaded polypropylene woofer with butyl rubber surround and 0.75" (19mm) titanium dome with Ferrofluid cooled neodymium magnet system shall be housed in a proprietary injection molded ABS, UV fade resistant enclosure. The enclosure shall exceed IEC60529 IP-65 ratings for dust and splash resistance, and Mil STD 810G for salt and humidity. Incorporated is a sealed input panel cover, and powder-coated aluminum grille. The loudspeaker color shall be either RAL 9016 (white) or RAL 9017 (black). The unit shall ship with a slip free u-bracket that is powder coated in the same color as the enclosure. The loudspeaker shall have an optional knurled ball-joint pan and tilt mounting system with a quick attach/detach mechanism. The loudspeaker shall comply with the following safety standards; CE. The loudspeaker shall meet the following performance specifications: On-axis system frequency range shall be 63 Hz to 30 kHz (-10 dB). The broadband sensitivity shall be 87 dB (2.83 V at 1m) SPL in full-space environment with recommended high-pass protection. The long-term power handling rating shall be 60W as defined in EIA-426B. The maximum continuous output shall be 105 dB SPL and the maximum peak output shall be 111 dB SPL. The nominal coverage pattern shall be 115 degrees conical. The transformer shall have power taps 30W, 15W, 7.5W, 3.8W & (1.9W 70V), plus an 8-ohm bypass, selectable using a slide switch on the rear of the enclosure. The loudspeaker Euroblock input connections shall allow for direct connection to 70-volt, 100-volt, or low-impedance amplifiers. The loudspeaker outer dimensions shall be 10.9" x 6.88" x 8.07" (277mm x 175mm x 205mm), and the unit net weight shall be 7.72 lbs (3.5kg) The warranty shall be 5 years. The loudspeaker shall be the Atlas + Fyne FS-4T surface mounted loudspeaker.