

NOVASONAR - Invisible loudspeaker

# DS-Series



|   |   |
|---|---|
| <b>Power handling: 30 Watts</b>               |   |
| Dimensions: Min. 470 mm x 600 mm              |   |
| <b>DS 30</b> (Ext. DSP recommended)           | 2 |
| <b>DS 30 / PN</b> (Incl. frequency crossover) | 3 |

|  |   |
|--|---|
| <b>Power handling: 60 Watts</b>                      |   |
| Dimensions: Min. 470 mm x 600 mm                     |   |
| <b>DS 60</b> (Ext. DSP recommended)                  | 4 |
| <b>DS 60 / PN</b> (Incl. frequency crossover)        | 5 |
| <b>DS 60 Stereo</b> (Ext. DSP recommended)           | 6 |
| <b>DS 60 Stereo / PN</b> (Incl. frequency crossover) | 7 |

**PN = Integrated frequency crossover**

Please click on the products to open the respective **data specification sheet**

[www.novasonar.de](http://www.novasonar.de)

specification sheets

# NOVASONAR DS 30

Invisible sound system for suspended acoustic canopy panels



Building material and the sound system from a single production source



Available in all existing versions and designs

## Description / Technical data

Flat-panel loudspeaker on the principle of the bending wave transducer with a flat panel membrane, which is brought to vibration by electrical exciters mounted to the back.

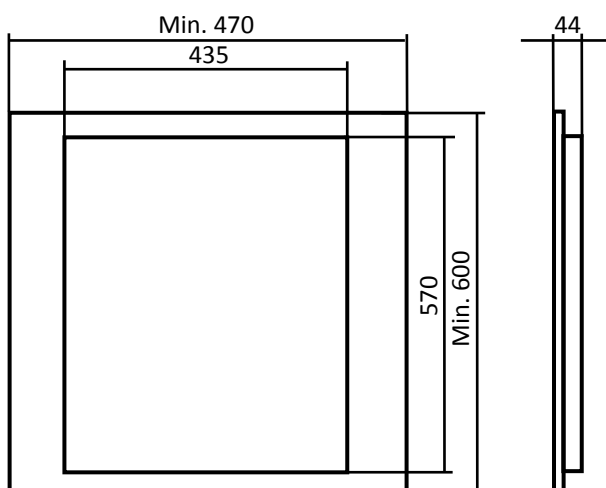
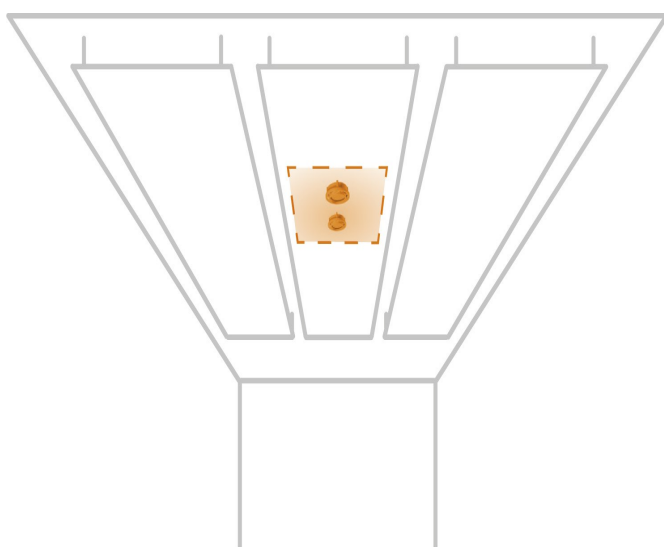
The loudspeaker comprises a conventional acoustic canopy panel with a factory-integrated flat-panel loudspeaker. The panel is stripped down to a minimum thickness on the back in the area of the loudspeaker membrane by means of milling and thus causes sound-neutrality.

Materials and assembly do not differ from other construction materials used and as a result, there are no „alien bodies“ in the installation.

Factory integration of the flat-panel loudspeaker in the building material precludes any errors in installation and guarantees continuously assembly and processing technology in drywall work without material change, therefore ensuring smooth progress on the building site.

Use of original acoustic panels will ensure continuous design in configuration of several panels - no matter whether with or without loudspeakers.

The flat-panel loudspeaker can also be factory-integrated into existing panels which are already mounted.



|                        |  |
|------------------------|--|
| Dimensions (standard): | Minimum 470 mm x 600 mm (depending on the panel) |
| Building material:     | Acoustic canopy panel                            |
| Frequency response:    | 80 Hz – 20000 Hz                                 |
| EQ:                    | External   |
| Dispersion:            | 180° x 180°                                      |
| Power handling:        | 30 W / 8 Ω                                       |
| Optional:              | 70/100 V   |
| Sensitivity:           | 80 dB (1 w / 1 m)                                |
| Max. SPL:              | 95 dB (1 m)                                      |

Manufacturer: ML-Audio und Carbons GmbH  
Model: Novasonar DS 30

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# NOVASONAR DS 30 / PN

Invisible sound system for suspended acoustic canopy panels



Building material and the sound system from a single production source



Available in all existing versions and designs

## Description / Technical data

Flat-panel loudspeaker on the principle of the bending wave transducer with a flat panel membrane, which is brought to vibration by electrical exciters mounted to the back and with an integrated frequency crossover/filter.

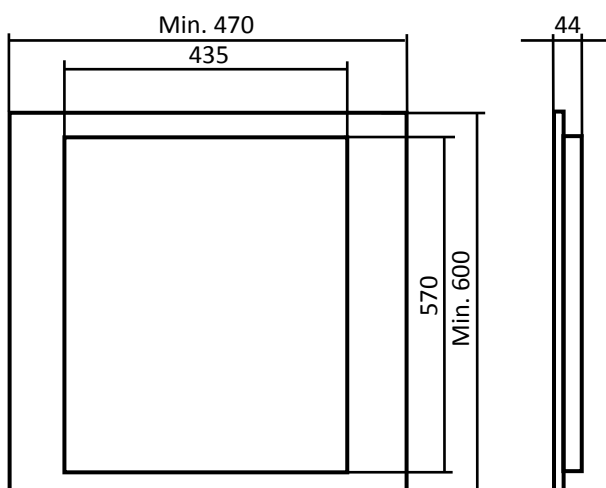
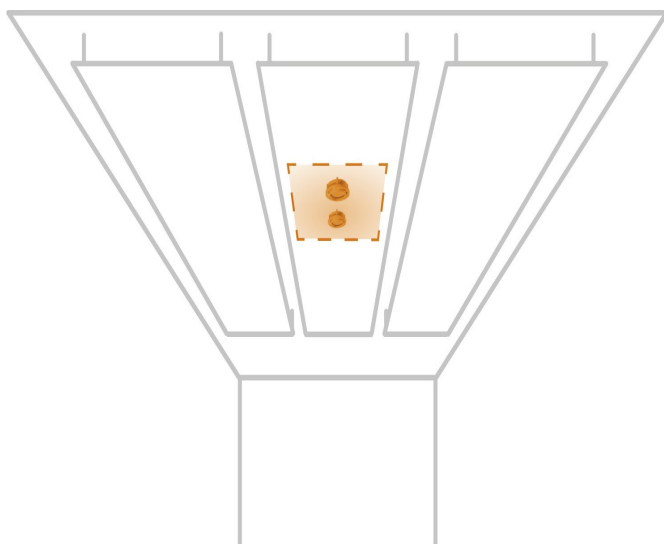
The loudspeaker comprises a conventional acoustic canopy panel with a factory-integrated flat-panel loudspeaker. The panel is stripped down to a minimum thickness on the back in the area of the loudspeaker membrane by means of milling and thus causes sound-neutrality.

Materials and assembly do not differ from other construction materials used and as a result, there are no „alien bodies“ in the installation.

Factory integration of the flat-panel loudspeaker in the building material precludes any errors in installation and guarantees continuously assembly and processing technology in drywall work without material change, therefore ensuring smooth progress on the building site.

Use of original acoustic panels will ensure continuous design in configuration of several panels - no matter whether with or without loudspeakers.

The flat-panel loudspeaker can also be factory-integrated into existing panels which are already mounted.



|                        |  |
|------------------------|--|
| Dimensions (standard): | Minimum 470 mm x 600 mm (depending on the panel) |
| Building material:     | Acoustic canopy panel                            |
| Frequency response:    | 80 Hz – 20000 Hz                                 |
| EQ:                    | PN– integrated crossover                         |
| Dispersion:            | 180° x 180°                                      |
| Power handling:        | 30 W / 8 Ω                                       |
| Optional:              | 70/100 V   |
| Sensitivity:           | 80 dB (1 w / 1 m)                                |
| Max. SPL:              | 95 dB (1 m)                                      |

Manufacturer: ML-Audio und Carbons GmbH  
Model: Novasonar DS 30 / PN

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# NOVASONAR DS 60

Invisible sound system for suspended acoustic canopy panels



Building material and the sound system from a single production source



Available in all existing versions and designs

## Description / Technical data

Flat-panel loudspeaker on the principle of the bending wave transducer with a flat panel membrane, which is brought to vibration by electrical exciters mounted to the back.

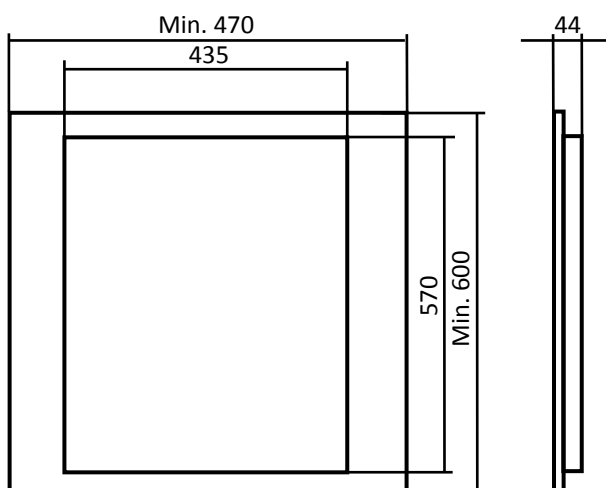
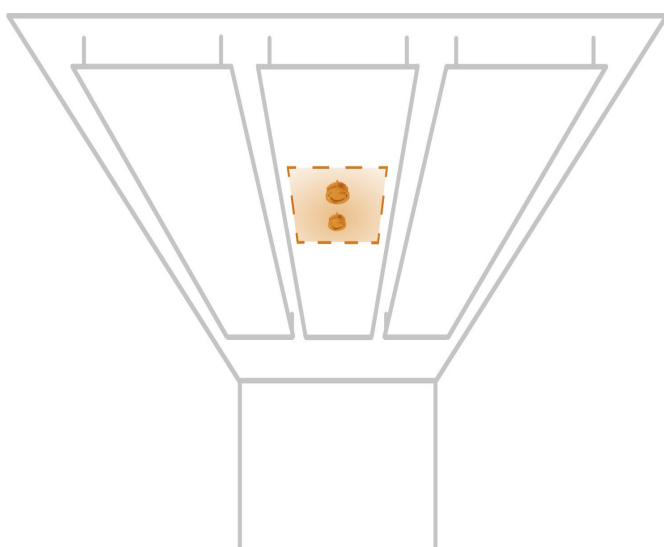
The loudspeaker comprises a conventional acoustic canopy panel with a factory-integrated flat-panel loudspeaker. The panel is stripped down to a minimum thickness on the back in the area of the loudspeaker membrane by means of milling and thus causes sound-neutrality.

Materials and assembly do not differ from other construction materials used and as a result, there are no „alien bodies“ in the installation.

Factory integration of the flat-panel loudspeaker in the building material precludes any errors in installation and guarantees continuously assembly and processing technology in drywall work without material change, therefore ensuring smooth progress on the building site.

Use of original acoustic panels will ensure continuous design in configuration of several panels - no matter whether with or without loudspeakers.

The flat-panel loudspeaker can also be factory-integrated into existing panels which are already mounted.



|                        |  |
|------------------------|--|
| Dimensions (standard): | Minimum 470 mm x 600 mm (depending on the panel) |
| Building material:     | Acoustic canopy panel                            |
| Frequency response:    | 80 Hz – 20000 Hz                                 |
| EQ:                    | External   |
| Dispersion:            | 180° x 180°                                      |
| Power handling:        | 60 W / 4 Ω (Optional 16 Ω)                       |
| Optional:              | 70/100 V   |
| Sensitivity:           | 83 dB (1 w / 1 m)                                |
| Max. SPL:              | 101 dB (1 m)                                     |

Manufacturer: ML-Audio und Carbons GmbH  
Model: Novasonar DS 60

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# NOVASONAR DS 60 / PN

Invisible sound system for suspended acoustic canopy panels



Building material and the sound system from a single production source



Available in all existing versions and designs

## Description / Technical data

Flat-panel loudspeaker on the principle of the bending wave transducer with a flat panel membrane, which is brought to vibration by electrical exciters mounted to the back and with an integrated frequency crossover/filter.

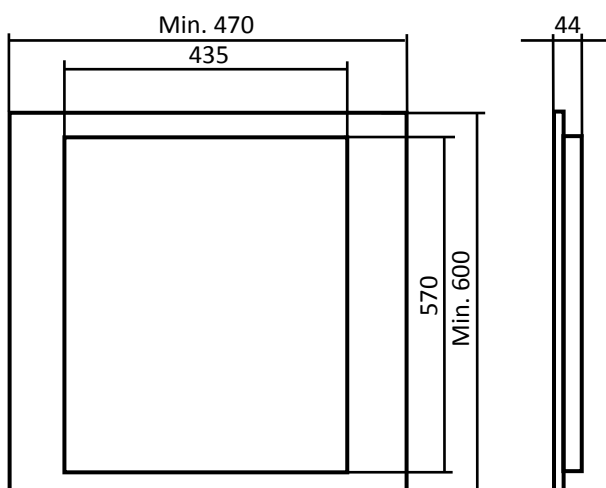
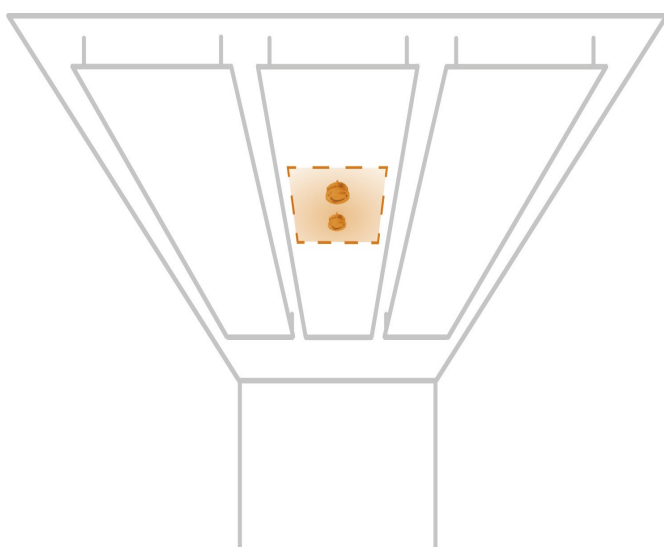
The loudspeaker comprises a conventional acoustic canopy panel with a factory-integrated flat-panel loudspeaker. The panel is stripped down to a minimum thickness on the back in the area of the loudspeaker membrane by means of milling and thus causes sound-neutrality.

Materials and assembly do not differ from other construction materials used and as a result, there are no „alien bodies“ in the installation.

Factory integration of the flat-panel loudspeaker in the building material precludes any errors in installation and guarantees continuously assembly and processing technology in drywall work without material change, therefore ensuring smooth progress on the building site.

Use of original acoustic panels will ensure continuous design in configuration of several panels - no matter whether with or without loudspeakers.

The flat-panel loudspeaker can also be factory-integrated into existing panels which are already mounted.



|                        |  |
|------------------------|--|
| Dimensions (standard): | Minimum 470 mm x 600 mm (depending on the panel) |
| Building material:     | Acoustic canopy panel                            |
| Frequency response:    | 80 Hz – 20000 Hz                                 |
| EQ:                    | PN– integrated crossover                         |
| Dispersion:            | 180° x 180°                                      |
| Power handling:        | 60 W / 4 Ω                                       |
| Optional:              | 70/100 V   |
| Sensitivity:           | 83 dB (1 w / 1 m)                                |
| Max. SPL:              | 101 dB (1 m)                                     |

Manufacturer: ML-Audio und Carbons GmbH  
Model: Novasonar DS 60 / PN

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# NOVASONAR DS 60 Stereo

Invisible sound system for suspended acoustic canopy panels



Building material and the sound system from a single production source



Available in all existing versions and designs

## Description / Technical data

Flat-panel loudspeaker on the principle of the bending wave transducer with a flat panel membrane, which is brought to vibration by electrical exciters mounted to the back and dual channel input for stereo applications.

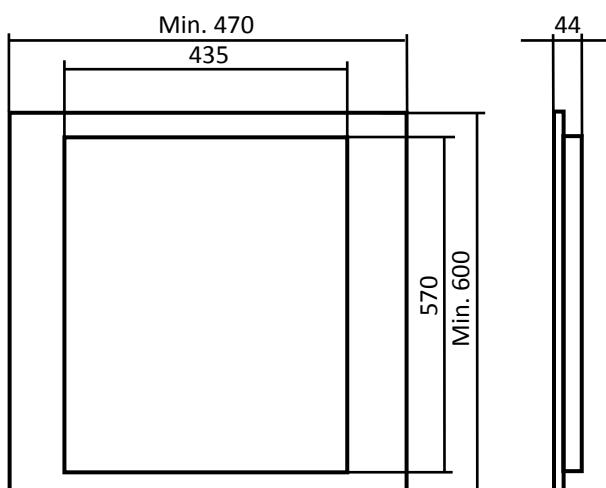
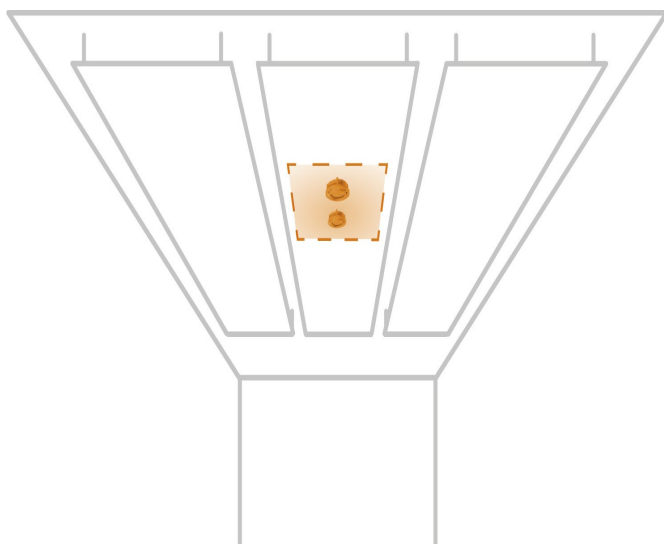
The loudspeaker comprises a conventional acoustic canopy panel with a factory-integrated flat-panel loudspeaker. The panel is stripped down to a minimum thickness on the back in the area of the loudspeaker membrane by means of milling and thus causes sound-neutrality.

Materials and assembly do not differ from other construction materials used and as a result, there are no „alien bodies“ in the installation.

Factory integration of the flat-panel loudspeaker in the building material precludes any errors in installation and guarantees continuously assembly and processing technology in drywall work without material change, therefore ensuring smooth progress on the building site.

Use of original acoustic panels will ensure continuous design in configuration of several panels - no matter whether with or without loudspeakers.

The flat-panel loudspeaker can also be factory-integrated into existing panels which are already mounted.



|                        |  |
|------------------------|--|
| Dimensions (standard): | Minimum 470 mm x 600 mm (depending on the panel) |
| Building material:     | Acoustic canopy panel                            |
| Frequency response:    | 80 Hz – 20000 Hz                                 |
| EQ:                    | External   |
| Dispersion:            | 180° x 180°                                      |
| Power handling:        | 2 x 30 W / 2 x 8 Ω                               |
| Optional:              | 70/100 V   |
| Sensitivity:           | 83 dB (1 w / 1 m)                                |
| Max. SPL:              | 101 dB (1 m)                                     |

Manufacturer: ML-Audio und Carbons GmbH  
Model: Novasonar DS 60 Stereo

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# NOVASONAR DS 60 Stereo / PN

Invisible sound system for suspended acoustic canopy panels



Building material and the sound system from a single production source



Available in all existing versions and designs

## Description / Technical data

Flat-panel loudspeaker on the principle of the bending wave transducer with a flat panel membrane, which is brought to vibration by electrical exciters mounted to the back and with two integrated frequency crossovers/filters for dual channel input for stereo applications.

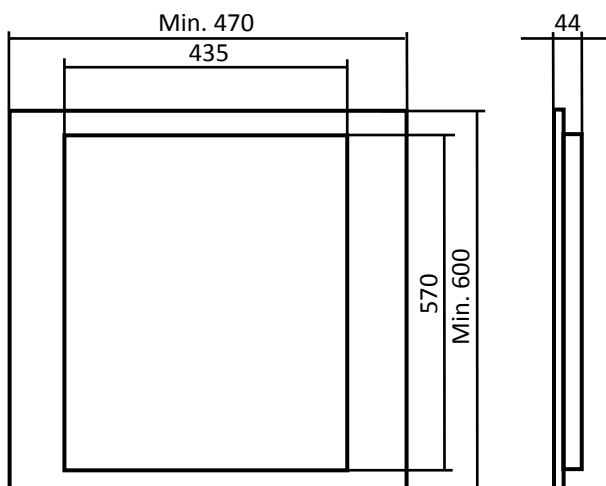
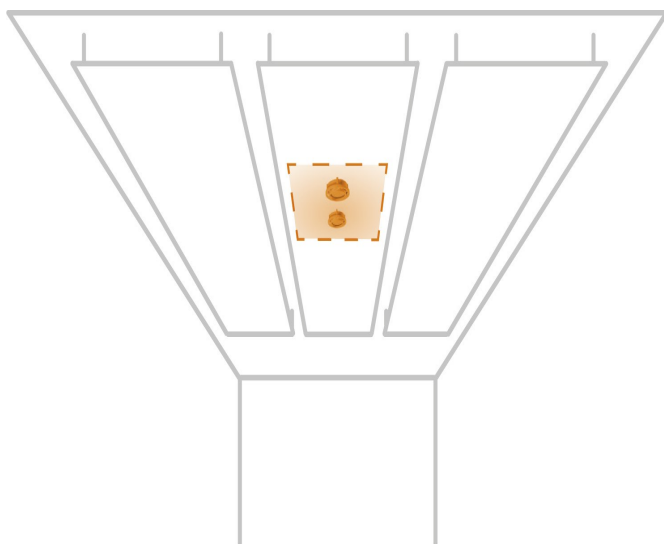
The loudspeaker comprises a conventional acoustic canopy panel with a factory-integrated flat-panel loudspeaker. The panel is stripped down to a minimum thickness on the back in the area of the loudspeaker membrane by means of milling and thus causes sound-neutrality.

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Use of original acoustic panels will ensure continuous design in configuration of several panels - no matter whether with or without loudspeakers.

The flat-panel loudspeaker can also be factory-integrated into existing panels which are already mounted.



|                        |  |
|------------------------|--|
| Dimensions (standard): | Minimum 470 mm x 600 mm (depending on the panel) |
| Building material:     | Acoustic canopy panel                            |
| Frequency response:    | 80 Hz – 20000 Hz                                 |
| EQ:                    | PN– integrated crossovers                        |
| Dispersion:            | 180° x 180°                                      |
| Power handling:        | 2 x 30 W / 2 x 8 Ω                               |
| Optional:              | 70/100 V   |
| Sensitivity:           | 83 dB (1 w / 1 m)                                |
| Max. SPL:              | 101 dB (1 m)                                     |

Manufacturer: ML-Audio und Carbons GmbH  
Model: Novasonar DS 60 Stereo / PN

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# NOVASONAR Invisible Sound System

WITH THE INTELLIGENT INTEGRATION CONCEPT FOR A PERFECT INSTALLATION



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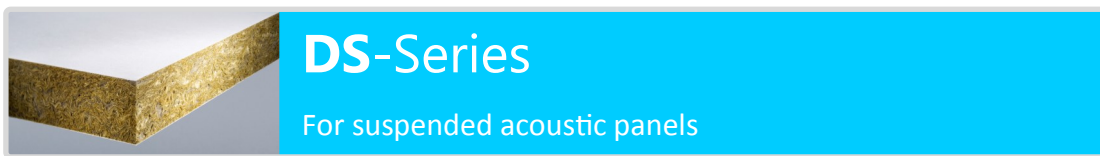
Fax +49 6 131 60 30 796

Email: [info@mlaudio.de](mailto:info@mlaudio.de)

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Data sheets valid from 2019/09/01





NOVASONAR - Invisible loudspeaker

# DS-Series



## Power handling: 30 Watts

Dimensions: Min. 470 mm x 600 mm

**DS 30** (Ext. DSP recommended)

**DS 30 / PN** (Incl. frequency crossover)

## Power handling: 60 Watts

Dimensions: Min. 470 mm x 600 mm

**DS 60** (Ext. DSP recommended)

**DS 60 / PN** (Incl. frequency crossover)

**DS 60 Stereo** (Ext. DSP recommended)

**DS 60 Stereo / PN** (Incl. frequency crossover)

**PN = Integrated frequency crossover**

Available in all usual versions and designs of acoustic panels

[www.novasonar.de](http://www.novasonar.de)

Product overview