

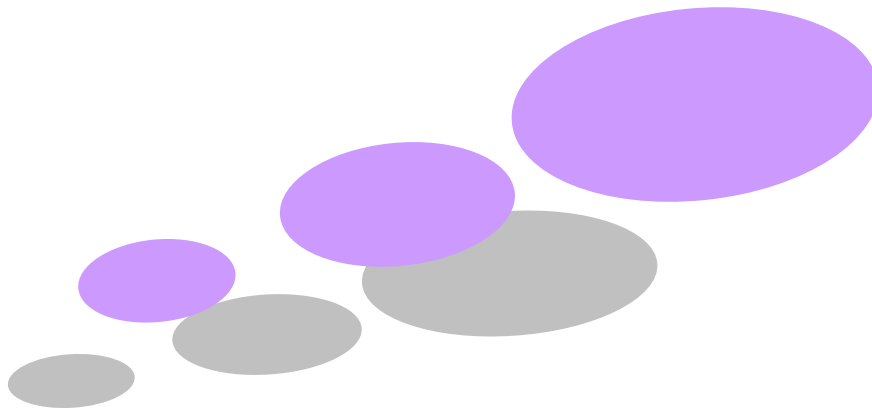
UCoustic™ Cab

The way a cabinet should sound

UCoustic™ Sound Proof Enclosures



UCoustic



UCoustic™ Sound-Proof Enclosures



- Capable of up to 28.5DBa noise attenuation
- Independently tested by 'MIRA' Test Laboratories (Sound Power Measurement in accordance with ISO3744)
- 7.2kW heat dissipation on active 9210 cabinets
- The UCoustic™ 9210 Cabinet is compatible with all leading server brands including blade servers
- Passive and active models available
- Floor standing and wall mounted versions available
- Patent pending design

UCoustic™ Introduction

The UCoustic family of enclosures has been designed to be more than just a state of the art sound proof cabinet; it's also a state of the art all round communications unit.

The combination of record breaking noise attenuation and thermal dissipation performance ensures the UCoustic™ family is a world class leader in its field.

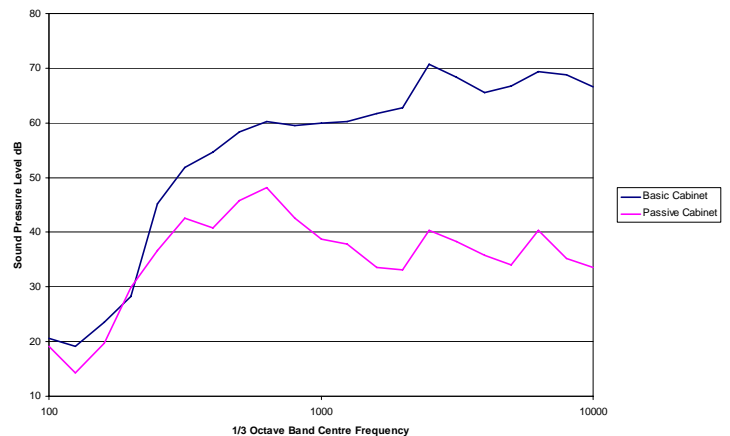
For the uninitiated 28.5DBa is a massive noise reduction to achieve from a 19" Enclosure and to achieve this USystems have invested heavily in research and development, utilising state of the art technology and included the latest most effective acoustic materials available.

This amazing noise reduction has been achieved without compromise to cooling the active equipment housed within. In fact the UCoustic™ 9210 not only out performs all other 19" enclosures in noise reduction but also in thermal capacity by achieving a staggering 7.2kw of heat dissipation.

Independently Tested



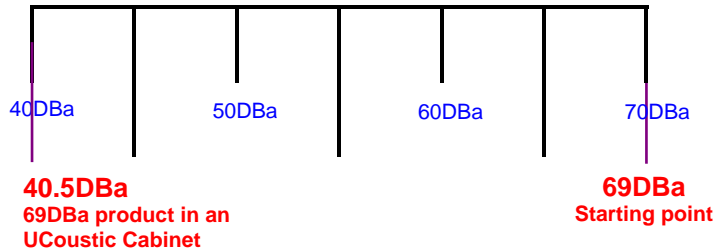
42U UCoustic Cab Sound Pressure Level Comparison



So what does 28.5DBa noise reduction mean and what benefits do I get?

As with all sound proof enclosures, the performance of the UCoustic™ family relies upon the ingenuity of the enclosure design and the acoustic material used in order to remove as much noise from the enclosed sound source (e.g. servers) as is possible. Noise is measured in decibels (DBa) so when we claim 28.5DBa noise attenuation, we are basically saying this is the amount of noise we are removing from the sound source. So if the starting point of the sound source is 69DBa (equivalent to a vacuum cleaner at 3m) then by removing 28.5DBa will be the equivalent of reducing the sound source down to say 'quiet speech' (see chart below) putting this into context, the cabinet placed in an office environment which can sit anywhere between 48DBa (average office without speech) and 78DBa (busy office with speech), then basically this is a long winded way of saying you will not be able to hear the original sound source from within the UCoustic™ Cab – unless you had your ear pressed up against the cabinet!

The chart below details the effect of housing noisy active equipment within an UCoustic Cab



Let's be clear, an acoustic cabinet is designed to attenuate (reduce) the noise source and assist in the cooling of the equipment. Unfortunately removing heat means providing air paths and this in turn means that if the sound source is very loud then you WILL hear some noise emanating from the cabinet. The skill is to remove as much of the noise without detriment to the equipment.

THE TABLE BELOW DEMONSTRATES NOISE COMPARISONS ON A SLIDING DBa SCALE

0DBa	20DBa	40DBa	60DBa	80DBa	100DBa	120DBa	140DBa
10DBa	30DBa	50DBa	70DBa	90DBa	110DBa	130DBa	
0DBa Threshold of sound	23DBa Human whisper	48DBa Quiet office	60DBa Normal conversation	70DBa Vacuum cleaner at 3m	90DBa	110DBa Pneumatic drill	130DBa Threshold of pain
10DBa Heartbeat			60DBa 1 x Standard Server	78DBa Noisy office			
				1 x Blade Server			

For an audible demonstration, please log on to our website www.ucoustic.com

UCoustic™ 9210 Cab

Available in three heights, 12U, 24U and 42U, 780mm wide and 1100mm deep the UCoustic™ 9210 cab comes in two variants Active and Passive. The Active is designed to deal with higher heat loads and comes complete with variable fan speed controlled and temperature sensor, ensuring maximum energy efficiency.

Setting aside its acoustic and thermal capabilities the UCoustic™ 9210 cab is a complete all round communications cabinet, addressing both active and passive equipment in equal measure. Accommodating all main server brands e.g. IBM, HP, Dell, Sun, Viglan, etc., plus as importantly dealing with the infrastructure cabling and patch cabling.

9210 Specifications

Active Specification:

- Passive Wardrobe Front Doors
- Active Rear Doors c/w Fan speed controller and temperature sensor
- 780w x 1100d Frame
- 19" Mounting Angles fitted front and rear
- Front and rear infill's
- Cable entry via base of cabinet and cable entry acoustic foam block
- Optional dust ingress protection
- All cladding is easily removable
- Load Bearing Castors

Passive Specification:

- Passive Wardrobe Front & Rear Doors
- 780w x 1100d Frame
- 19" Mounting Angles fitted front and rear
- Front and rear infill's
- Cable entry via base of cabinet cable entry acoustic foam block
- Optional dust ingress protection
- All cladding is easily removable
- Load Bearing Castors

42U 9210 Active Rear Doors



24U 9210 Passive Front Doors



UCoustic™ 9210 Cab

UCoustic 9210™ Specifications

	12U Passive	12U Active	24U Passive	24U Active	42U Passive	42U Active
Floor Footprint	780w x 1100d	780w x 1100d	780w x 1100d	780w x 1100d	780w x 1100d	780w x 1100d
Cladding Footprint	780w x 1200d	780w x 1210d	780w x 1200d	780w x 1210d	780w x 1200d	780w x 1210d
External Height ¹	716mm		1250mm		2050mm	
Useable Depth ²	850.2mm		850.2mm		850.2mm	
Product Weight	109.5kg	118kg	166.5	179kg	275kg	298kg
Load Capacity ³	500kg	500kg	500kg	500kg	500kg	500kg
Max Power Consumption	N/A	1amp	N/A	1amp	N/A	1amp
Attenuation performance ⁴	28.DBa	28.5DBa	28.DBa	28.5DBa	28.DBa	28.5DBa
Maximum Heat Load ⁵	1.75kW	7.2kW	2.25kW	7.2kW	2.75kW	7.2kW

¹ On castors

² Distance between 19" mounting angles NB 19" Mounting Angles have full adjustability throughout useable depth

³ See weight load guidelines

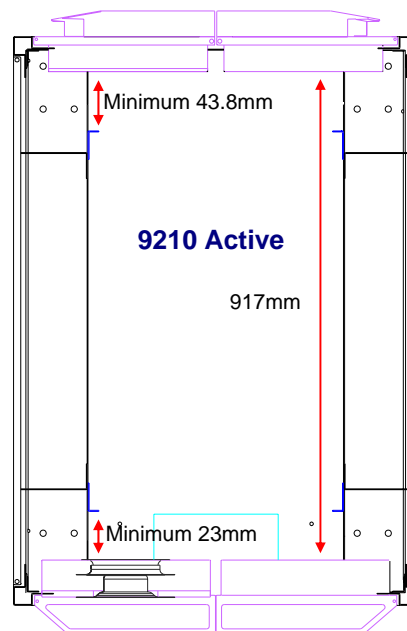
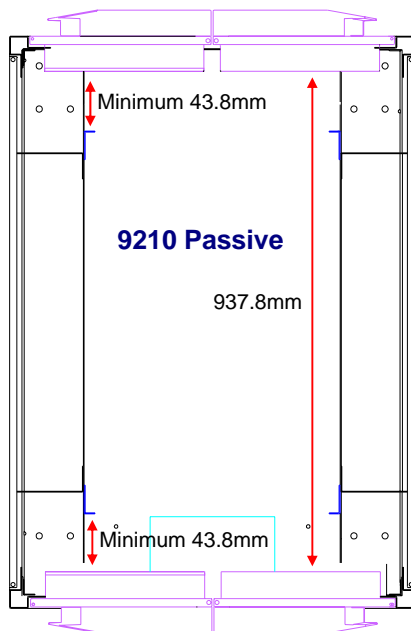
⁴ 0.5DBa is gained by using blanking panels

⁵ See thermal guidelines

Manufacturing Statement:

Manufactured in accordance with IEC 297 3 and EIA STD 310 for panels and racks for housing electronic equipment

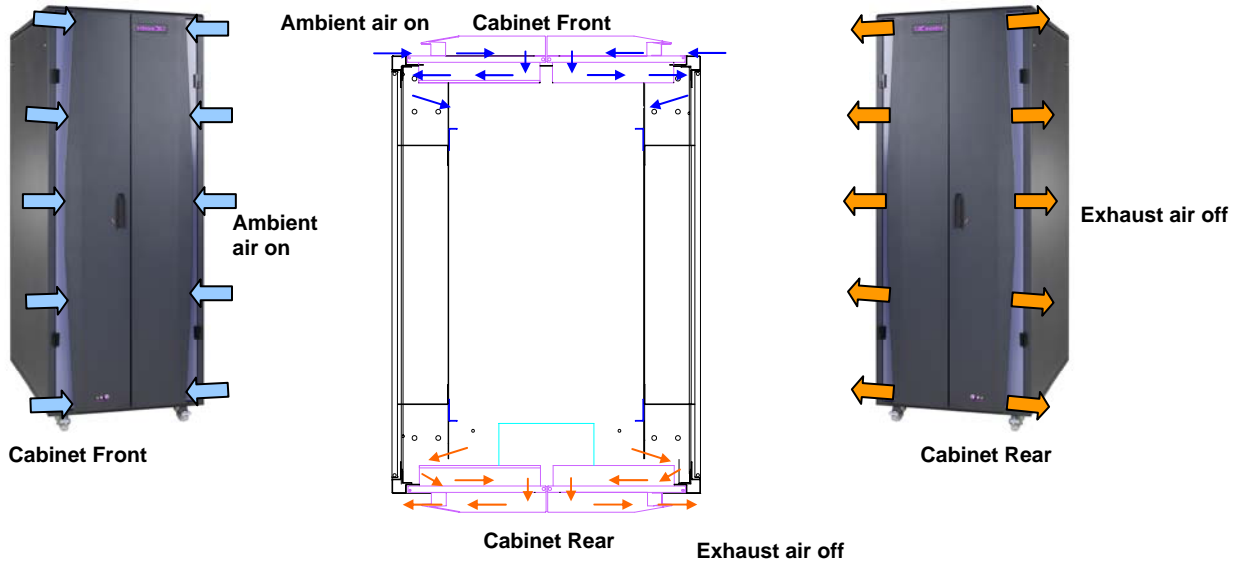
Flammability: Acoustic Foam FMVSS 302 – Pass. UI94: V0, HF1
ISO 9001 Accreditation



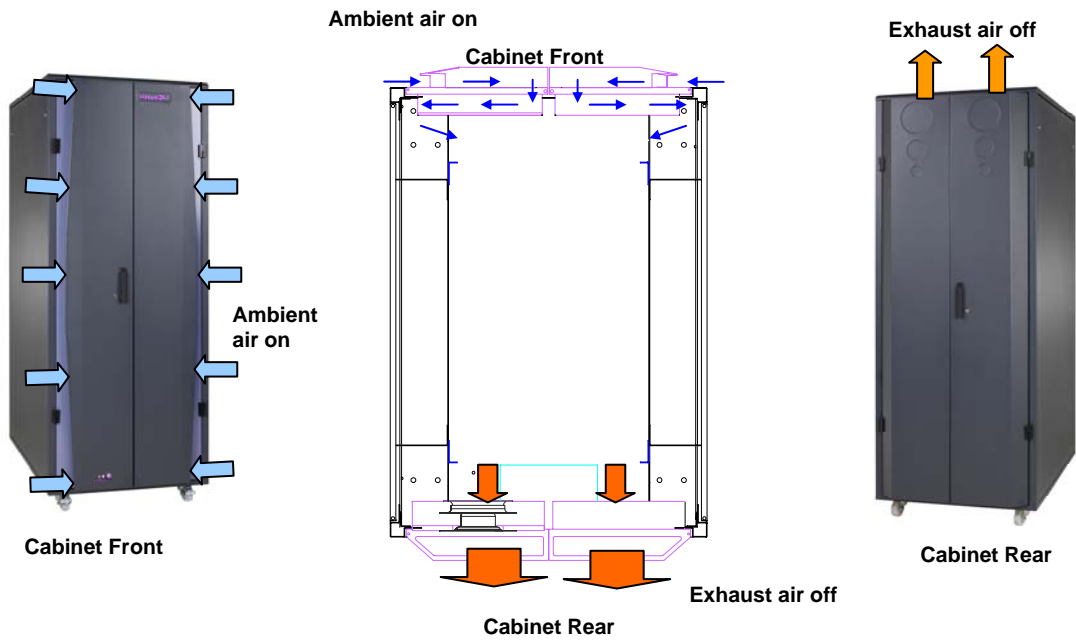
UCoustic™ 9210 Cab

Airflow Characteristics

9210 Passive



9210 Active



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UCoustic™ 8210 Cab

About 8210

The 8210 is the smallest cabinet in the UCoustic™ family; however the same level of attention to detail has been applied to its design and performance as with the 9210. The 8210 has been designed to address both active and passive equipment in equal measure.

8210 Specification:

- Passive Front Doors
- Active Rear Panel c/w Fan speed controller and temperature sensor
- 780w x 170d Frame
- 19" Mounting Angles fitted front and rear
- Front infill
- Two cable entry options
- Optional dust ingress protection
- All cladding is removable
- Load Bearing Castors

12U 8210 Cabinet



	12U 8210
Floor Footprint	780w x 700d
Cladding Footprint	780w x 755d
External Height ¹	716mm
Useable Depth ²	445mm
Product Weight	73kg
Load Capacity	250kg
Max Power Consumption	750mA
Attenuation performance ³	27DBa/27.5DBa
Maximum Heat Load ⁴	4kW

¹ On castors

² Between 19" mounting angles

³ 0.5DBa is gained by using blanking panels

⁴ See thermal guidelines

Easily Removable cladding



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UCoustic™ 8250 Wall Box

About 8250

The 8250 is unique in the field of sound proof 19" enclosures in that it is a wall box. As a part of the UCoustic family it shares the same level of attention to detail as with the 8210. The wall box has been designed to address both active and passive equipment in equal measure.

8250 Specification:

- Quick fit hanging panel
- Passive Front Doors
- Active Rear Panel c/w Fan speed controller and temperature sensor
- 780w x 700d Frame
- 19" Mounting Angles fitted front and rear
- Front infill
- Two cable entry options
- Optional dust ingress protection
- All cladding is easily removable

12U 8250 Wall Box



	12U 8250
Floor Footprint	780w x 700d
Cladding Footprint	780w x 755d
External Height ¹	716mm
Useable Depth ²	445mm
Product Weight	73kg
Load Capacity	250kg
Max Power Consumption	750mA
Attenuation performance ³	27DBa/27.5DBa
Maximum Heat Load ⁴	4kW

¹ On castors

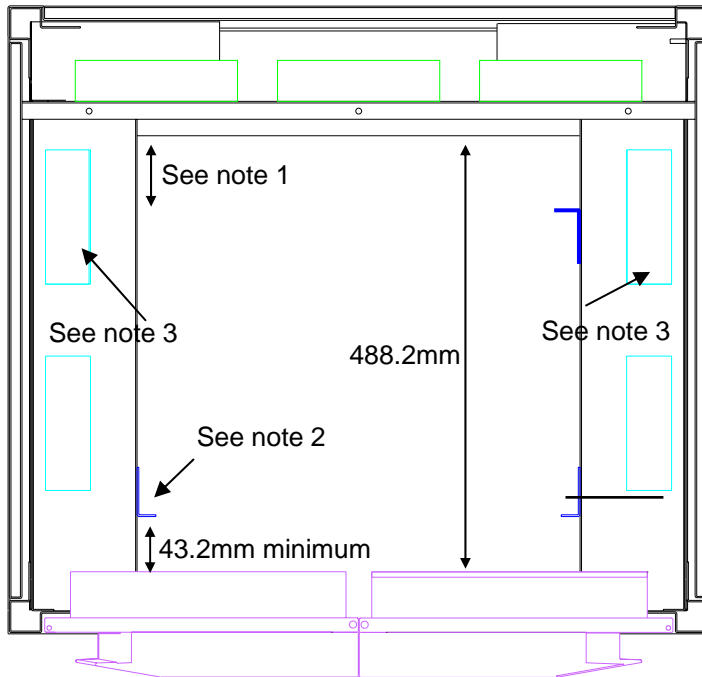
² Between 19" mounting angles

³ 0.5DBa is gained by using blanking panels

⁴ See thermal guidelines

UCoustic™ 8210 Cab & 8250 Wall Box

UCoustic™ 8210 Cab and 8250 Wall Box Dimensional information



Note 1: Rear mounting angles can move to the full depth of the cabinet; however it is paramount that active equipment is not pressed up against the rear face as this will impede the performance the equipment fans.

Note 2: 19" Mounting angles can be moved the full depth of the cabinet

Note 3: As standard cable entry opening and acoustic foam block is provided on one side of the cabinet; however the 8210 has provision for additional cable entry. Please consult with sales desk if you wish to order an additional acoustic cable entry foam block. NB. Foam blocks can be retro fitted.

UCoustic™ 8210 Cab and 8250 Wall Box Airflow Characteristics

