



DUPLEX Inter-H

Revolutionary ceiling-mounted decentralised air-handling unit for classrooms, meeting rooms, libraries, and more





Eliminate Condensate Drainage Worries

Featuring an intelligent control system that switches the electric cell and turns condensate into steam, our unit effortlessly expels the steam along with waste air. This innovative approach eliminates the need for condensate drainage and building connections, reducing overall costs and simplifying the installation process.



Draughtles air distribution

Innovative supply diffusers use the **Coanda effect** to distribute the supply air evenly without draughts throughout the ventilated room.

+ | + Interior design

Additional cladding with the possibility of installation after commissioning of the unit until the clean phase of construction.



Two performance sizes

DUPLEX Inter-H is available in two sizes, **1000** and **770**, thus 99 % of the projects are covered by a single unit in the room.

The possibility of partial recessing into the ceiling

A standard feature – by simply turning the front outlet (no need to order a specific version as with some other manufacturers).

UNRIVALED NOISE REDUCTION

The most quiet units on the market

Trully unrivaled noice reduction as a result of sophisticated sound attenuation construction.

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Splitting the unit into two parts

High heat recovery efficiency

Our conterflow heat recovery cores reach an exquisite

real efficiency up to 93 %, which is of course reflected in

lower energy consumption, reduction in heating costs

and total energy savings of the building.

up to 93 %

Easier handling and easier passage through the door.



Pre-heater included as standard

No need to deal with heat exchanger freezing.

Electrical pre-heater

To avoid any problem with frost protection the unit is standardly equipped with an electrical pre-heater. An easily installable electrical reheater is part of the optional accessories offer.



Compact design

With only 550 mm of height is DUPLEX Inter-H one of the flattest unit on the market.



Simple and fast filter change

Automatic shutdown of the unit when the door is opened for filter change. Automatic filter pressure differential measurement -> "filter clogged" message. Automatic testing of the filter pressure differential after replacement and subsequent automatic cancellation of the "clogged filter" message.



Fast, easy and therefore

Inexpensive installation Original assembly kit with drilling template and pipe into the penetration stepby-step instructions.



No need to order a specific design like some competitors. Very versatile use of the units thanks to smart solutions and possible saving of storage space.



Hygienic design VDI 6022 ready

From the begining units are designed to meet a very high hygienic standard. It fulfills all the requirements that are given in the standard VDI 6022 - such as access for cleaning all the internal surfaces, laboratory tested materials which are in contact with the fresh air.

····· 100% by-pass

The unit is equipped with a bypass damper that can be either closed for heat recovery ventilation or fully open for night pre-cooling mode.

Fully autonomous operation

Integrated CO₂ sensor (NDIR type - infrared) ensures the fully autonomous and most energy efficient operation of the unit. This eliminates the need for installation of the controller, thus saving costs as all the necessary alerts.

CONTROL SYSTEM

aMotion control system

Our brand-new and yet the most modern control system for comfortable unit control. The aMotion control system offers integrated Web Server as a standard. This enables not only remote control from anywhere on Earth, but also remote service accesss (checking settings, errors, service analysis), which reduces service costs. Also with option of connecting to the higher-ranking systems of centralized building management.

A wide range of sensors (temperature, humidity, air quality, etc.) can be included in the system to enable automatic control for economical operation.



aDot controller

- Touchscreen
- Simple, unassuming yet feature-packed



aTouch controller

- Touchscreen and fully colourful controller
- On the wall design
- Similar design with ATREA web interface
- Built-in temperature sensor for free ambient temperature control

Various functions:

- A proper CO₂ infrared type sensor as a standard part of the unit for fully automated operation based on real CO₂ concentration in the room.
- **Relative humidity and air quality sensor** an option to set the intensity of ventilation automatically based on those parameters.
- Modbus TCP in standards communication with a high er-ranking system for BMS.
- User preferences including setting weekly programmes.
- The web interface allows fully automatic operation with out the need for a controller.

- Built-in web server for remote service access and error notification.
- Functions related to the absence of the controller inside the room: automatic shutdown when the door is opened, automatic filter pressure differential measurement for efficient filter change management.
- · Combined electrical heating and preheating.
- External inputs function ventilation switches as required.
- **BACnet / KNX** optional converter enables connection to the superior system via BACnet or KNX protocol.

Top quality components:





For more information visit **www.atrea.eu**