



Johnson Controls

Introduction to Channel Sales Range of Products

The power behind **your** mission



130 Years
of innovation experience

100,000+ Experts globally



150 countries offering
a local service from
2000 locations



more than

8,700 Active Patents

4+million
Customers globally



\$78 million
in charitable contributions
in the past **5** years



40+

Named in 40+ leading
sustainability indices

We are in **90%**
of the world's most
iconic buildings



Delivering outcomes in
Smart Buildings
Smart Cities
Data Centers
Healthcare
Higher Education
K-12
Entertainment
Transportation



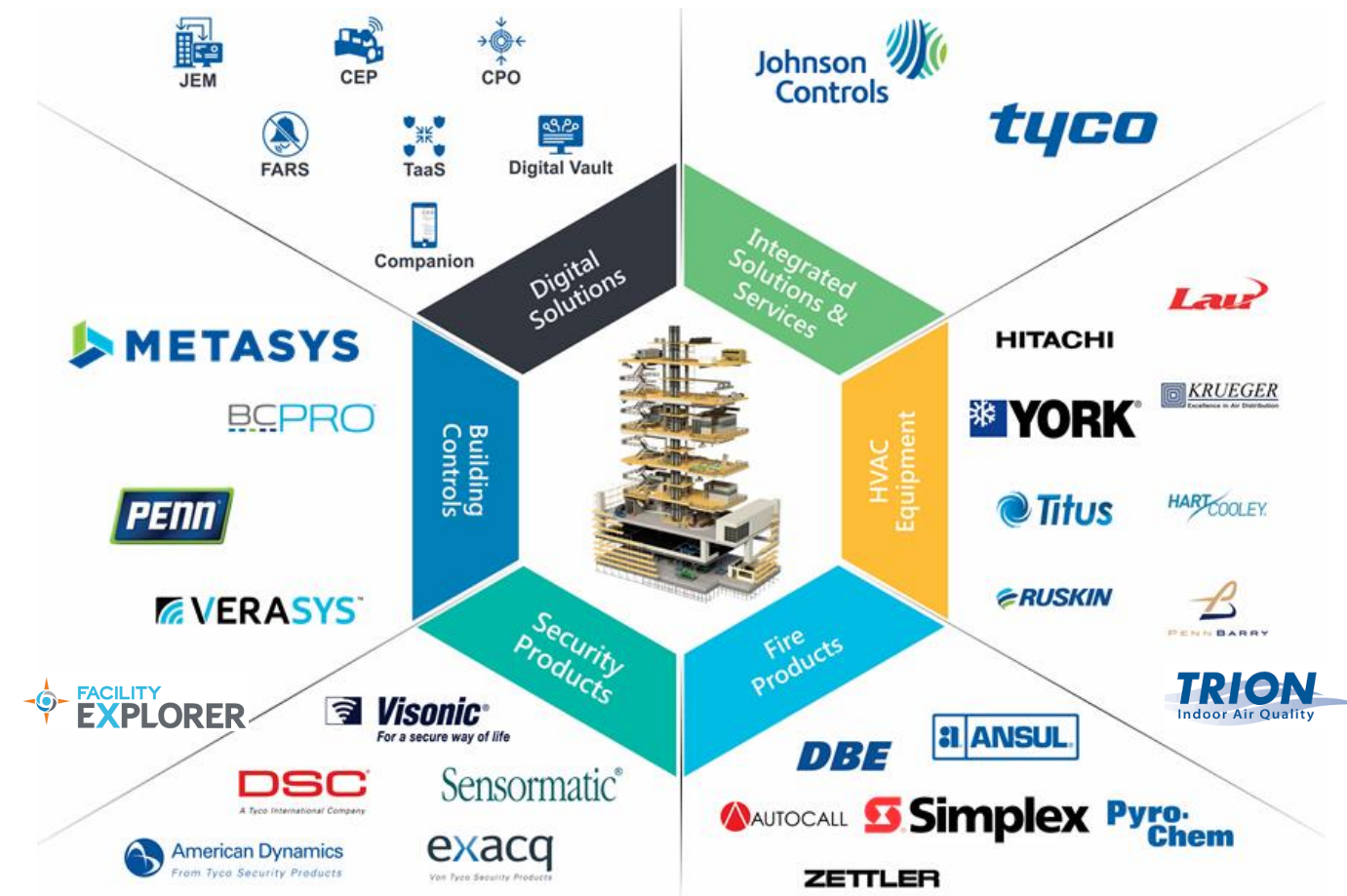
We have delivered over
26M Metric tonnes
of CO₂ **reduction**

Over **\$3.9** billion **Energy savings**
and more than
\$2.1 billion **Operational savings**



316,000+
Volunteers Hours

Johnson Controls, India - building technologies and solutions



1995

Established in India

3

Manufacturing sites

4

Major technology centers

15+

Branches

350+

Cities and towns covered

24/7/365

Service support

3,000+

Employees in India

1,400+

Engineers

500+

Front-line staff

40%+

Specialized experts

15+

Energy auditors

We offer a complete portfolio of products and solutions built on industry-leading brands for buildings and cities.

The power behind your mission

The Johnson Controls promise

We advance the safety, comfort and intelligence of spaces and places to power your mission.



Our values

- Integrity-first
- Purpose-led
- One Team
- Customer-driven
- Future-focused



Our vision

- A safe, comfortable and sustainable world



Our mission

- Helping our customers win everywhere, every day

Segments we serve....

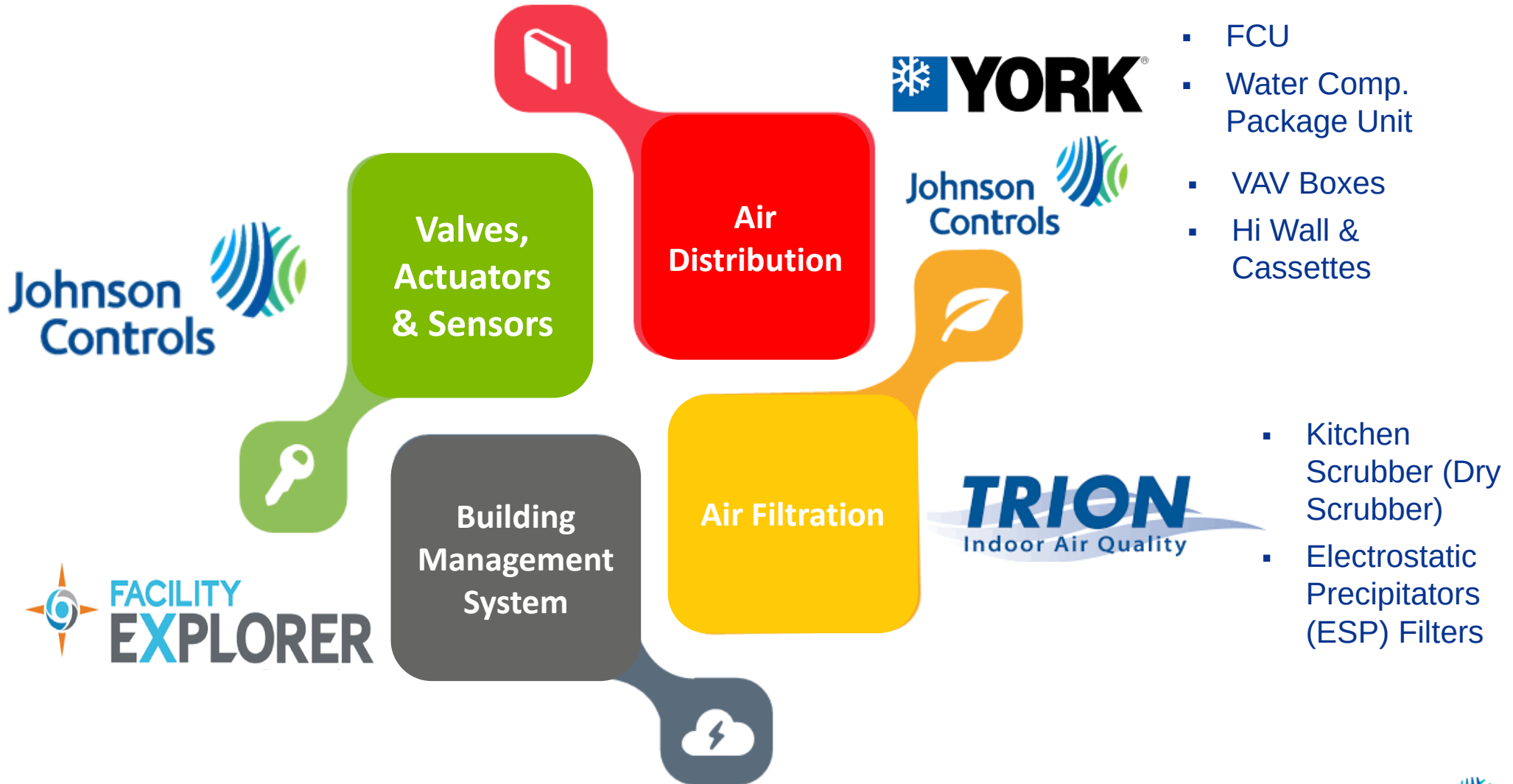


We offer the largest portfolio of smart building products, technologies, software and services.

Products / Solutions & Brands under Channel Sales

- Valves
- Actuators
- Switches
- Sensors
- Thermostats

- DDC Controller
- Integrator/Router
- Sensors
- Software



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- Valves
 - Actuators
 - Switches
 - Sensors
 - Thermostats



**Valves,
Actuators
& Sensors**



T4 Products (AHU/FCU Control Valves with Actuators & Thermostats)

Application : T4 range of products include Air Handling Unit / Fan Coil Unit Control Valves and Thermostats, which are used to control the flow of chilled water in the respective coils, to deliver optimum comfort / temperature in the conditioned space. Primarily used for energy efficiency of a chilled water system.

AHU & FCU CONTROL VALVES



THERMOSTATS FOR AHU & FCU APPLICATION



T7200
Thermostat



T7600 Comm.
Thermostat
(ModBus)



T8600 Comm.
Thermostat
(BACNet)



NSA 7000
Thermostat

FLOW SWITCHES



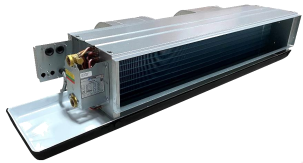


- FCU
- Water Comp. Package Unit
- VAV Boxes
- Hi Wall & Cassettes

FCU Product Range



High Static Pressure



YGFC Series

Flow: 170 - 2400m³ /h.
Static Pressure: 0-80 pa
Motor: AC / BLDC
TR: 1.67-13.7 KW
Row Option: 2/3/4/3+1



YDFC Series

Flow: 680 - 3500m³ /h.
Static Pressure: 0-160 pa
Motor: AC
TR: 6.27KW- 14.57KW
Row Option: 3/4/3+1



YAH Series

Flow: 1500 – 15,000m³ /h.
Static Pressure: 0-220 pa
Motor: EC
TR: 18.6KW- 252KW

Product Features

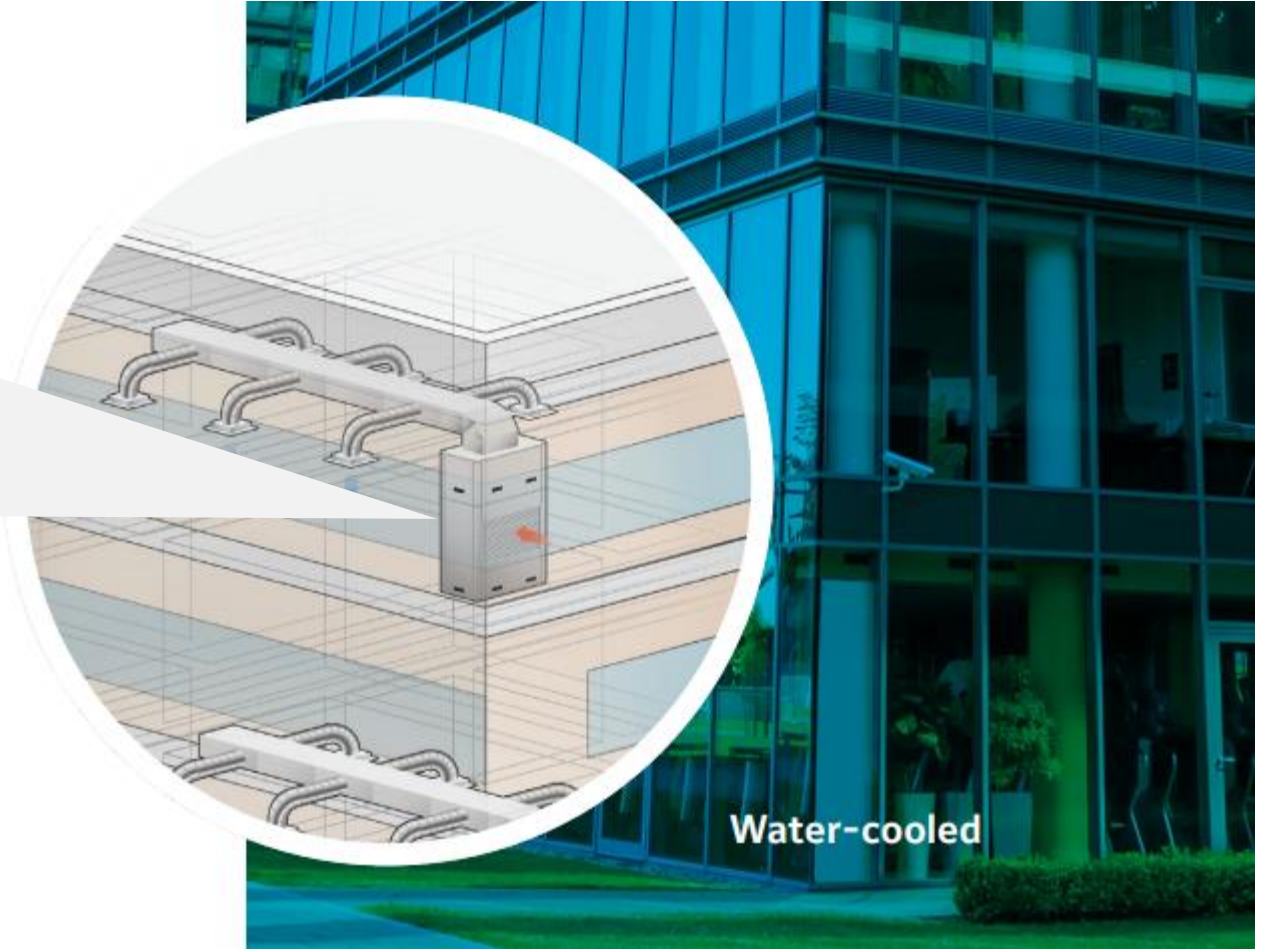


Water Comprehensive Package Unit



Ideal for:

- Large Halls
- Dedicated areas
- Restaurants
- Supermarkets / Hypermarkets



Salient Features of WCPU

Energy Saving and High Efficiency

- Water as the cooling/heating medium which has more efficiency than air.
- Cooling and heating can be achieved through water loop systems, providing comfort and cost saving all year around.
- Energy can be transferred easily in the system providing excellent solution to diversity effect.
- Central air conditioning plants are used for applications like big hotels, large buildings having multiple floors, hospitals, etc, where very high cooling loads are required

Convenient Operation and Maintenance

- The installation and operation are easy.
- The design reduces the failure rate and the need for frequent service.
- Even if there is a faulty unit in the system, other units in the system will not be affected

Flexible Application

- Main water pipes can be installed during building construction and water source heat pump can be installed in the later stage.
- Different capacity and unit design can be decided during renovation which offers flexibility and convenience.



Low Noise

- It can be installed in any place. - Air noise can be totally eliminated and proper installation location with noise barrier can be selected.
- Specially designed casing with vibration absorption material
- Insulated and separated compartment for compressor and supply air contribute further to the superb low noise performance.

Economics

- Compare with ordinary central air conditioners, the unit does not require service rooms nor ventilation ducts.
- The unit is assembled at the factory and the water piping system does not require additional insulation.
- Units come with a temperature controller.

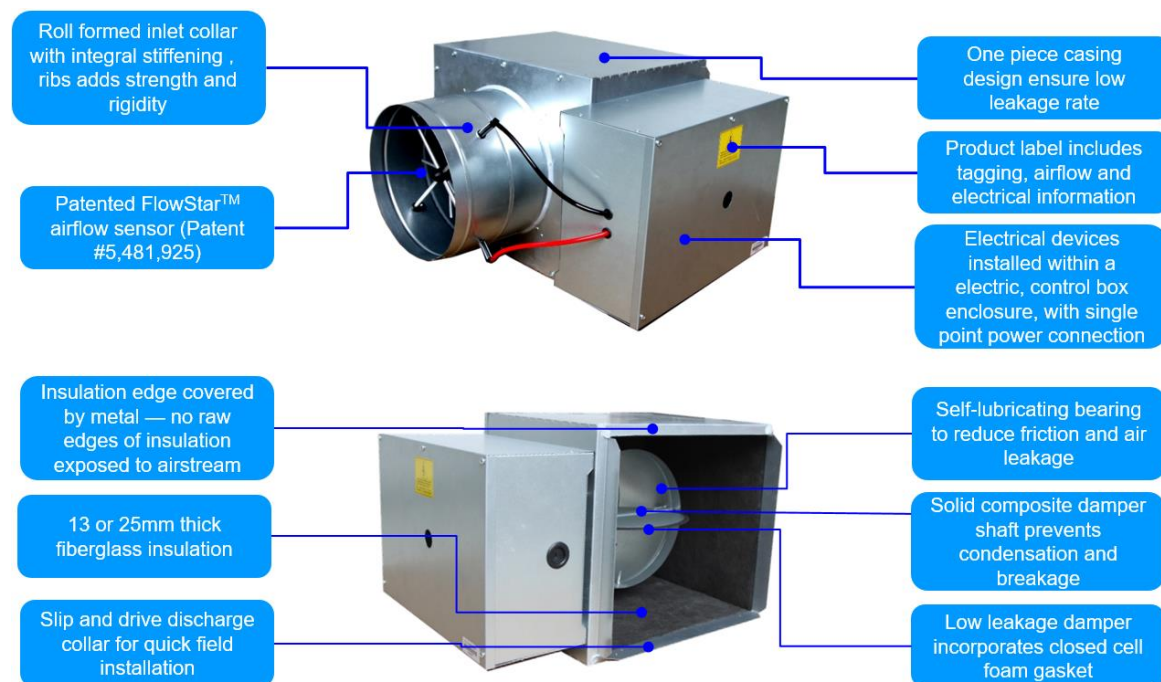
Simple Control

- The system is controlled by microcomputer which offers accurate and simple operation.
- Independent control for each unit provide convenient and comfort to each room without affecting others.

VAV Terminals (VAV Boxes)

Application : Single duct VAV terminals, commonly known as VAV boxes provide variable air volume (VAV) control beyond the typical single duct box. They are specifically designed for precise air delivery throughout the entire operating range, regardless of the installed inlet conditions. They also offer improved space comfort and flexibility for a wide variety of HVAC applications.

Through the precise control, based on the temperature requirement of the occupied space, they facilitate the ramping up/down of the AHU fan motor optimizing the speed, thereby saving energy.



VMA1617 BACnet
MS/TP Controller



TE730
Thermostat



NSA 7000
Thermostat

Hi Wall & Cassettes



Hi Wall



4 Way Cassette



1 Way Cassette

Salient features

- Ample coil surface area for enhanced cooling performance
- Multi fan speeds for powerful & quiet cooling operation.
- Auto swing for good air flow.
- Ultra-low height design
- Large LCD display of Room Temperature on the front panel
- Coil with 7mm grooved copper pipes for high efficiency.
- Hydrophilic aluminum fins for longer life
- Energy saving BLDC motors for 0.8 TR to 2 TR capacity
- Sleek hand-held wireless remote for easy operation
- Optional Wired remote
- Optional externally mounted Valve Package with options of 2-way valve, 3-way valve and PICB valve
- Optional Drain pump for critical applications
- Inbuilt UV lamp as an option for air stream disinfection

Options:



Valve Package



Optional Drain Pump



Optional UVGI for Air Stream Disinfection

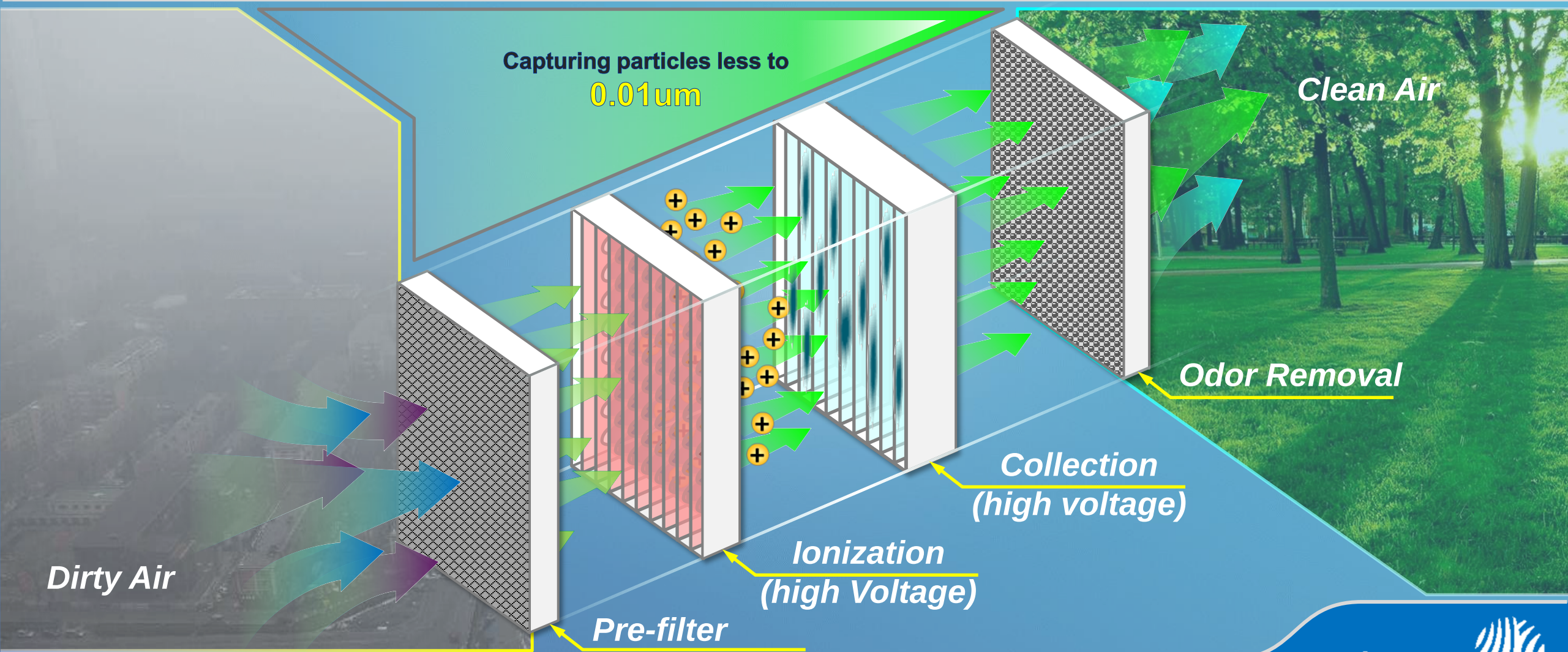
A graphic featuring a yellow rounded square with the text "Air Filtration" in white. To its right is an orange shape resembling a leaf or a stylized "L" with a white leaf icon inside the top curve.

Air Filtration

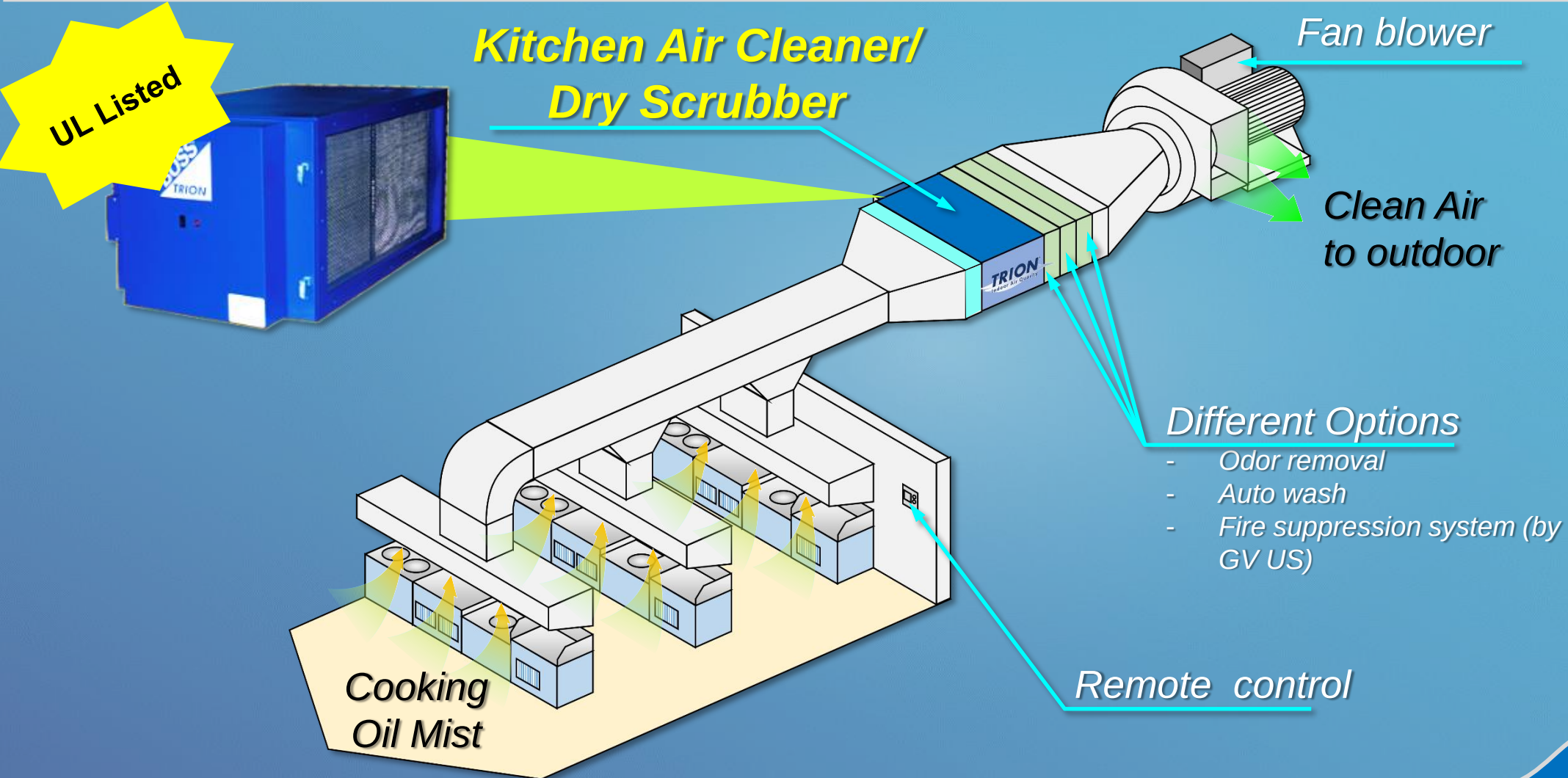
TRION
Indoor Air Quality

- Kitchen Scrubber (Dry Scrubber)
- Electrostatic Precipitators (ESP) Filters

Electrostatic Precipitation Process -Working Principle



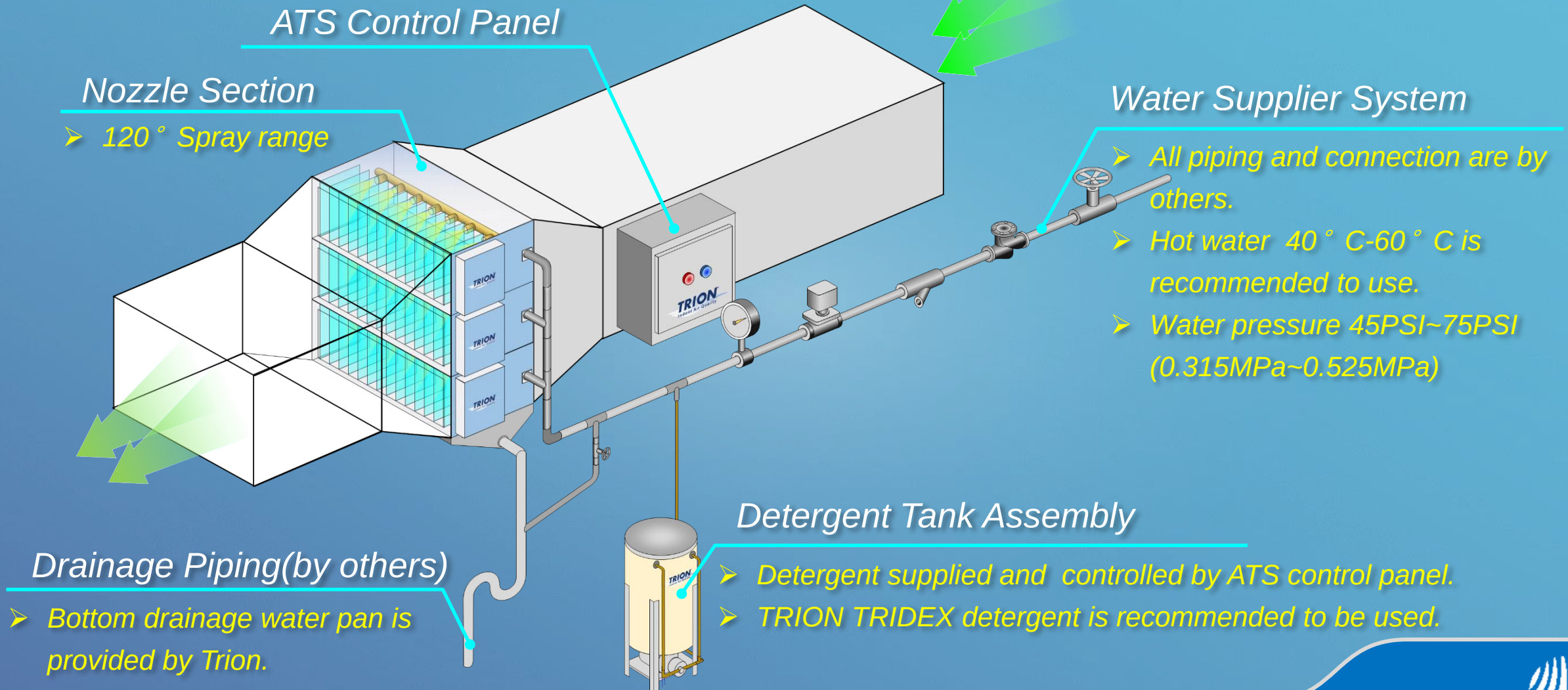
Typical Application in System



Note: for some projects, fire suppression system is required in the Kitchen Exhaust System.

Auto Wash System

➤ Total wash hours: 2 hours



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- DDC Controller
 - Integrator/Router
 - Sensors
 - Software



**FACILITY
EXPLORER**

**Building
Management
System**



Building Management Systems (BMS)

Application : A Building Management System (BMS) is a DDC based single point monitoring & control of all the HVAC, Electrical and other utilities including Chillers, Boilers, Pumps, Cooling Towers, Air Handling Units, Fan Coil Units, Exhaust / Ventilation Fans, Electrical Circuits, Lighting, BTU meters, Electrical meters, DG sets, Sewage Treatment Plants, Tanks, Sumps, Lifts, and others in a building aimed at saving energy and labor costs through out the life cycle of the building (commercial space / hotels / hospitals / life sciences / malls / ...alike...

DDC CONTROLLERS



INTEGRATORS / ROUTERS



SENSORS



Some of our Prestigious Customers...



The power behind **your mission**

When you partner with Johnson Controls, we treat your mission as our own. We put our deep expertise, leading technology and world-class products to work for you, never resting until you achieve your goals.

Learn more when you visit us

<https://www.johnsoncontrols.com>

Thank you

