Field Devices Product Offering

Line card

Schneider Electric Field Devices' product line offers a full range of Living Space Sensors, Plant Room Sensors and Valves and Actuators to enhance Indoor Air Quality, improve Energy Efficiency and optimize Building Management in a wide variety of commercial applications.



Life Is On Sch



SpaceLogic Living Space Sensors

Analog and Protocol Sensors

- Multi-sensor platform: CO₂, VOCs, • Temperature and RH sensors available •
 - Housing Finishes: Optimum Black and White, and Matte White
- Display Options: 61mm (2.4") backlit color touchscreen, LCD with buttons, and blank display option in all housing types.
- Replaceable RH element available in 1% & 2% with NIST certificate
- Field calibratable non-dispersive • infrared CO₂ sensor

SpaceLogic Analog & Protocol Sensors

Communicating Sensors

- Multi-sensor platform: Temperature, RH, VOCs, and CO2 sensors available
- Housing finishes: Optimum Black and White, and Matte White
- Cover variants:
 - Blank, No User Interface
 - 3-Button User Interface, Setpoint and Override
 - Touch Screen User Interface (61 mm (2.4"))
- · Field calibratable non-dispersive infrared CO₂ sensor
- Status options: Heating, cooling, Eco-mode
- Suitable for Light & Blind control via Connected Room Solution (CRS) - Touchscreen models only

Communicating Sensors

Glass Touch Panels

· Customizable intuitive panels with a wide range of color and icon options suitable for guestroom applications



- Capacitive touch buttons to control lighting, HVAC, curtain control, scenes etc configured as per project requirement
- Modbus communication, with low voltage operation
- · Easy to install and maintain

Glass Touch Panels



- Thermostats
- Large backlit LCD screen
- Optimum (with capacitive buttons) and medium (with mechanical buttons) housing options
- Eco button for energy savings
- Button lockout function •
- Non-volatile memory (EEPROM) • retains user settings during power loss
- Low temperature protection •
- Optional Modbus communication •

Thermostats

EcoStruxure Building-IoT Sensor Solution

- Portfolio of battery powered Indoor Air Quality (IAQ) sensors, desk and room occupancy sensors and gateway
- 8-in-1 comprehensive IAQ sensor including Temperature, Humidity, CO₂, VOCs, Pressure, Noise, Light and Particulate Matter 1, 2.5, 4, 10
- Battery lasting up to 5 years
- Multi-protocol gateway which • supports Power-over-Ethernet and integrated GSM-LTE Slot
- Cloud-based device management • platform able to support thousands of devices
- Open APIs enabling integration • with any Integrated Workplace Management System (IWMS) or Building Management System (BMS) of choice

Link coming soon

















SpaceLogic Plant Room Sensors

Air Quality Sensors

- All-in-one sensor with multiple sensing measurements comprising Temperature, RH, CO₂, VOCs and Particulate Matter 1, 2.5,4, 10
- Field replaceable Humidity and Temperature modules
- Selectable BACnet or Modbus outputs with a flip of the switch
- Selectable voltage and current analog outputs with a flip of the switch
- Screwless terminal block with latch on cover for easy and quick installation
- Field Calibratable CO₂ Sensor
- High Accuracy

Air Quality Sensors

Temperature Sensors

- IP65 rating
- Transmitter comes in a variety
 of length options
- Multiple sensing elements and calibration certification options
- Easy integration with all BMS systems
- High Accuracy
- Simple and quick to install

Temperature Sensors

Humidity Sensors

- Humidity and Temperature sensing in one device for simple installation and wiring
- Field replaceable Humidity and Temperature modules
- Selectable BACnet or Modbus
 outputs with a flip of the switch
- Selectable voltage and current analog outputs with a flip of the switch
- Screwless terminal block with latch on cover for easy and quick installation
- High Accuracy

Humidity Sensors





Pressure Sensors

- All-in-one device for pressure and velocity with a flip of the switch.
- Ease of installation with a captured cover design and external screw terminal
- Bi-directional mode configuration with quick setting
- Circuit protection avoids damage due to incorrect wiring
- Suitable for harsh environments with IP65 housing
- 0.5% and 0.25% accuracy for critical applications in healthcare and life sciences

Pressure Sensors

Current Sensors

- Range of switches delivering high performance and reliable current monitoring
- Suitable for applications including fan status, belt loss and variable speed drive
- Detection of changes in amperage sending a digital output / alarm to the BMS controllers
- Solid-core versions for new projects and split-core versions to accommodate retrofits
- Auto-calibration and reset features
- Current sensing from 150mA to 200A

Current Sensors

Flow Meters

- Three communication channels due to the calculator's two module slots and optional integrated wired M-Bus
- Built-in programmable data
 logger with AMR readability
- Improved M-Bus functionality with configurable M-Bus modules
- 3 front keys and optional backlit display
- Auto-detection of K-series
 flow sensor ULTRAFLOW
- K-Series suitable for high accuracy Ultrasonic Heat-Cool Metering and communication with BMS using LON, M-Bus, Modbus or BACnet







SpaceLogic Valves and Actuators

Pressure Independent Balancing and Control

Valves

• Best-in-class hydronic performance in terms of flow curve, pressure stability and flow limitation providing accurate and predictable control



- Full complement of sizes from DN10 to DN250 to reach design flows as high as 407000 l/h or as low as 30 l/h
- Male-threaded connections allowing union type connections which provide easy installation
- Wide differential pressure operating range, from as low as 16 kPa on unit valves and up to 600 kPa for all the sizes
- Unique plug design on the terminal unit sizes for high resistance against blockages of solid contaminants

Actuators

- Spring Return available up to DN150 (6")
- Multi-signal for any common BMS signal including sequencing control
- Smart Fieldbus Actuators enabling remote hydronic balancing, energy valve control with ΔT management and equipment health analytics

PIBCV Valves & Actuators

Butterfly

Valves

- Undercut discs for low actuator force on low duty applications
- High pressure liner encapsulation design for high system duty applications
- EPDM liner suitable for +121 'C hot and –29 'C chilled water media
- Gas tight Rate A leakage to EN 12266-1
- Nylon, Stainless and Zinc coated discs

Actuators

- Integrated Stem heaters and IP65 enclosures for exterior applications.
- Simple mounting onto valve bonnet with ISO mating flange connections. No linkages.
- Hand Levers available for all sizes
- Auxiliary switch available or options on actuators
- Adjustable position speed
- Visual position indication

Butterfly Valves & Actuators

Valves (Crown Venta style)

- Crown plug design for exceptionally smooth low flow control
- Very high differential pressure control, up to 800 kPa
- Super high rangeability up to 200:1
- Pre-Bonded gasket simple to assemble

 no additional gaskets required
- Nodular iron construction for longer life and high corrosion resistance

Valves (VB-7000 series)

- Patented precision plug for high rangeability promoting efficient heat transfer
- Multiple Cv and fitting choices to match loads and piping.
- Very low Cv models (as low as 0.1) for precise control of small and light load applications
- Availability of rebuild kit to ensure long operating life and reduce maintenance costs

Actuators (Forta)

- High positional resolution accuracy paired with high rangeability
- Multi-signal control in all actuators reduces SKU's required and simplifies selection
- Manual override can be operated without disconnecting the power
- Feedback signal in all models
- 3 or 4 wire electrical connection
- Indicators for visual feedback of stroke position
- Auxiliary switch options (integrated or optional for retrofit) 2 x SPDT
- 24 Vac or Vdc supply
- 3 x cable gland entries (EU) / 2 x conduit gland entries (NAM)

Actuators (MG350)

- Compact for fan coils, unit ventilators, reheat, cooling units, perimeter heating, and other applications
- Control flexibility with Proportional, Floating, or PWM control option.
- Auto-calibration provides precise control by scaling the input signal to match the event travel of the velve stam
- match the exact travel of the valve stemTri-color LED indicator for motion,
- In-color LED indicator for motion, auto-calibration and alarm status.

Globe Valves & Actuators













SpaceLogic Valves and Actuators

Ball (VBB/VBS Valves with M2/M3 Actuators)

Valves

- Best-in-class ANSI IV internal seat
 leakage rating with high close-off ratings
- 300:1 rangeability with 8 Cv models in ½" & ¾" designed to perfectly match coil requirements.
- Low torque, self-adjusting ball and seal design

Actuators

- Easy to install onto valve with PopTop technology
- Easy to field-configure Proportional modes via dip switches
- Compact design of assemblies allows actuators to be removed with only 1" of clearance

Ball Valves & Actuators

Damper Actuators

- Enable air movement control from the smallest to the very largest air handling equipment
- Intelligent torque control is used in the motors for stall protection
- Low power consumption while idle
- Overload protection throughout rotation
- Optional built-in auxiliary switches
- True mechanical clockwise or counterclockwise spring return operation for reliable, positive closeoff in airtight applications
- Visual position indicator
- Direct acting or reverse acting control mode available on proportional models
- Rotation limiting option available
- Rugged die-cast housing for NEMA 2/IP54 rating

Damper Actuators







Zone (Erie VT/VS Valves with AG/AH Actuators)

Valves

- Industry leading Cv ratings and port configurations
- Designed to match Fan Coils (FCU) and Packaged Terminal Air Conditioner (PTAC) coils and control requirements
- 400 psig static pressure rating

Actuators

- General and High Close-Off actuators with industry leading voltage and auxiliary switch options for both normally opened and normally closed applications
- Easy to install onto valve with PopTop technology
- Easily attached after the valve body has been installed and pressure tested

Zone Valves & Actuators





EasyLogic Sensors

Living Space Sensors

- Cost-effective, temperatureonly Living Space Sensor
- Small form factor, basic housing, simple functionality
- Connects to SpaceLogic and EasyLogic controllers via analog inputs
- · Easy to install and wire
- Surface mount, no limitations on wall box
- Blank cover model suitable for third party controllers and systems



- Microprocessor-based control and large backlit LCD screen
- Keypad lockout function prevents
 unauthorized operation
- Non-volatile memory (EEPROM) retains user settings during power loss
- Low temperature protection
- Snap on design for quick and easy installation
- Minimal white housing design with mechanical buttons





Wet Pressure Sensor & Differential Wet Pressure Sensor

- High measurement accuracy
- Resistant to extreme temperatures
- Multiple ranges available
- Supports both AC and DC power supplies
- Supports both current
 and voltage outputs
- Ideal for liquid and neutral gas applications



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Water Flow Switch

- Tested quality
- Ideal for a wide variety of liquid pressure applications up to 10bar (1MPa)
- Supports DN25 to DN200 pipelines
- Stainless-steel paddles (4 sizes) can be removed or modified to suit the application
- Adjustable setpoint and flow values
- Fully enclosed housing protects electrical components from dust and water vapor
- Large wiring space for convenient installation

EasyLogic Valves and Actuators

Butterfly

Valves + Actuators VFZ210F

- DN sizes from DN50 TO DN500, wafer connection, PN16 rated pressure and a 1200kPa close-off pressure, zero leakage rate to ensure no energy loss
- · Easy installation, valve comes with actuator
- Ductile iron valve body provides a robust solution
- Polyester coated body ensures anticorrosion for harsh environments



- Two-valve stem seals ensure the fluid medium is completely isolated from the stem to prevent leakage
- With IP67/68 enclosure ratings, possible to use outside door and with other wide applications
- Modulating actuators have the flexibility to operate as either 0-10V or 4-20mA control or feedback signal, easy to configure
- Large screw terminals

Ball

Valves & Actuators (BVA Series)

 High precision actuators reduce pressure surges (water hammer) and provide high rangeability across the family

• DN sizes from DN15-150 to meet nearly

every application. DN15-50 are PN25

rated brass valves while DN65-150 are



- PN16 flanged ductile iron valvesV-shape structure provides equal percentage control
- The ball valve actuator has the flexibility to operate by dip switch
- Reliable ball and stem are made with stainless steel materials and perform better in harsh conditions

Globe

Valves (GV210R)

- Bronze valve body
- Soft seals provide tight close-off for ultralow leakage, to enhance energy savings
- The U-Bolt short and robust yoke offers a compact size and facilitates installation
- Precise flow plug is designed for equal percentage flow curve, providing precise control and high rangeability



- The packing gland, combination of a spring-loaded PTFE and EPDM O ring, ensure constant contact with the valve stem and seal against varying system pressure and media temperatures
- The bonnet and slotted stem adapter are user-friendly for assembly, either with Forta MG600 actuators and Smart MG350 actuators

Actuators (MG350C)

- Compact size for fan coils, unit ventilators, reheat, cooling units, perimeter heating, and other applications
- Flexible control with proportional, floating option
- Auto-calibration provides precise control by scaling the input signal to match the exact travel of the valve stem
- Tri-color LED indicator for motion, auto-calibration and alarm status

Zone

Valves + Actuators (ZV Series)

- 220VAC or 24VAC, DN15-DN25 DN size, 2-way or 3-way, valves and removable actuators can be used in a variety of HVAC applications
- Spring return function makes sure to close the valve while power is removed from the actuator





- Compact designed valves are easy to install and good for tight spaces
- With durable rubber paddle and synchronous motor, the product is reliable, quiet and has a long life cycle.
- Operates with manual override, easy to use and the actuator push button allows easy removal for replacement



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