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SMART MICROWAVE SENSORS

COM HUB® Relay

Advanced Connectivity for Modern Traffic Detection

Whether you're managing a single intersection or a more complex traffic monitoring setup, the COM HUB Relay devices provide flexible, future-proof solutions designed to simplify installations, improve system performance, and enhance connectivity.

Supports up to 4 Sensors (TOPGRD or TRUGRD) for more solutions in traffic management systems. With advanced communication options like PLC, LAN/MQTT, and VPN, these devices enable efficient traffic detection and provide seamless integration with intelligent traffic light controllers.

COM HUB® Relay 8

Ideal for single sensor deployments

COM HUB® Relay 24

Ideal for larger installations

Why choose the COM HUB Relay ?

No Separate Software Required

Manage and configure the system using the built-in **Traffic Web UI**, streamlining setup and diagnostics with no need for additional software.

Multi Sensor Fusion (patented)

The ability to seamlessly track all traffic participants across the entire intersection, including the inner area, sets it apart from traditional systems.

Advanced Multi-Sensor Coordination

With up to **4 sensors** integrated, the devices cover all approaches of an intersection, offering a full-field view and overlapping sensor fields that create redundancy for improved accuracy.

State-of-the-art Connectivity

Supports **PLC, LAN/MQTT**, and **VPN**, ensuring reliable, remote access and integration with modern traffic management systems.

Where to use ?

Applications of COM HUB Relay

Signalized Intersections

Vehicle presence detection at signalized intersections to improve traffic flow and traffic signal timings.

Ready for next-generation traffic control

Switching to object-based data transmission via MQTT eliminates the need for predefined radar zones and paves the way for intelligent, adaptive traffic control.

Key Features

Sensor Connectivity
Supports 2 (COM HUB Relay 8) or 4 (COM HUB Relay 24) sensors (either TOPGRD or TRUGRD, but not both simultaneously).

Relay Outputs
Provide direct control for traffic light systems and other connected devices. 8 (COM HUB Relay 8), 24 (COM HUB Relay 24) or 56 relay outputs (COM HUB Relay 24) when combined with the Relay 32 XP Module.

PowerLine Communication (PLC)
PLC technology reduces the need for extensive wiring. Using just 3 wires and supporting distances up to 300 meters.

LAN/MQTT Support
With LAN and MQTT integration, the COM HUB Relay 8 & COM HUB Relay 24 ensures seamless connectivity to modern traffic control systems.

Traffic Web UI for Easy Setup
Configuration and diagnostics are handled directly through the Traffic Web UI, accessible via direct LAN connection or Wi-Fi using the web browser.

Real-Time Consolidated Object List
Objects will be tracked seamlessly. This leads to one single object list available in real-time for advanced traffic light controllers and for V2X **applications.**

Interference-Free Operation of all sensors
Enables interference-free operation of all sensors by ensuring that each radar device transmits its signals during dedicated time slots.

Surge and lightning protection for sensors and cabinet equipment

Automatic software update of all connected sensors and modules

Seamless AI Tracking
Optimized for Super Resolution AI tracking, the COM HUB Relay provides accurate vehicle tracking with minimal dead zones, offering enhanced traffic detection and classification.

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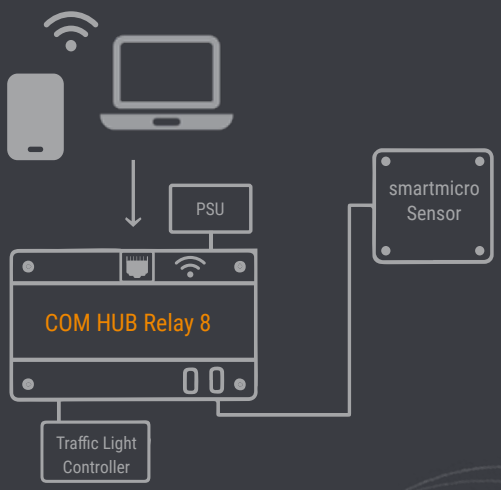
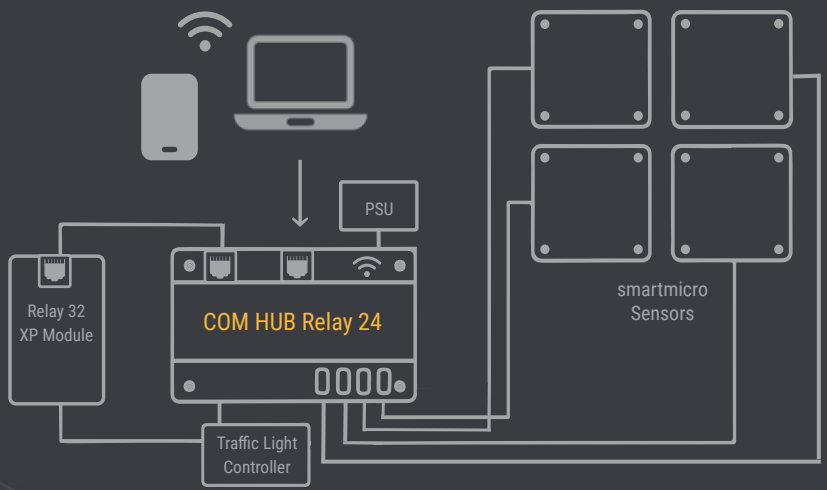
FEATURES	COM HUB Relay 8	COM HUB Relay 24
Amount of Sensors to connect	2	4
Suitable Sensor families	TOPGRD, TRUGRD*	TOPGRD, TRUGRD*
Amount of Relay outputs	8	24 (56 with the Relay 32 XP Module)
LAN ports (MQTT supported)	1	2**
RS 485 connections	1	1
Wi-Fi Connectivity	yes	yes
User Interface	onboard Traffic WEB UI	onboard Traffic WEB UI
		* mixing sensor types is not possible ** one port can be used to connect to Relay 32 XP Module or to SDLC Module
MECHANICAL		
Weight	492 g | 17.35 oz	676 g | 23.84 oz
Dimensions (H/W/D)	176.5 x 105 x 51.3mm | 6.95 x 4.13 x 2.02 in	212 x 105 x 51.3mm | 8.34 x 4.13 x 2.02 in
GENERAL		
Operating Temperature	-34…+74°C | -29…+165°F	-34…+74°C | -29…+165°F
Operating Voltage / Power Supply	24VDC or 48VDC	24VDC or 48VDC





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