OPTICAL SENSORS

Clear Vision, Clearer Decisions: Optical Sensors for Uncompromised Safety

General Overview:

At WISE Group, we offer a range of state-of-the-art optical sensors from a wide variety of vendors designed for critical visibility and cloud height measurements. Initially popular at airports and heliports, these advanced sensors are now essential offshore tools, significantly enhancing helicopter traffic safety. Our selection of optical sensors, featuring sophisticated lenses and optical components, are meticulously engineered for resilience against vibration and mechanical shocks. We recommend employing shock absorbers for optimal offshore installation. Moreover, these sensors are finely tuned to prevent shadowing from structures and interference from

Cloud Height Sensors:

The cloud height sensors utilise cutting-edge laser LIDAR (Light Detection and Ranging) technology. These sensors emit short, powerful laser pulses either vertically or near-vertically, capturing light backscatter from clouds, precipitation, or other atmospheric elements to accurately determine cloud base height. With a range capability of up to 25,000 ft (75 km), these sensors are available as standalone units with specialised software or integrated into a comprehensive HMS (Helideck Monitoring System).

Visibility Sensors:

The forward-scatter visibility meter, a prime component of our optical sensors, calculates the Meteorological Optical Range (MOR) by measuring the scatter of infrared light in the air. This technology is particularly effective for visibility measurement in diverse environments such as airports, onboard ships, and remote meteorological stations. It's also invaluable for fog detection and warning systems on highways. These sensors boast an impressive range of up to 75,000 meters and feature a low-maintenance lens design, ideal for offshore applications.

Present Weather Sensors:

The Present Weather option in the visibility sensors automatically identifies and reports seven different precipitation types: rain, freezing rain, drizzle, freezing drizzle, mixed rain/snow, snow, and ice pellets. This feature is especially beneficial for operations dependent on visibility conditions.

For more detailed information and specifications, please reach out to our team.

WISE Group—Automasjon & Data AS
Vassbotnen 23
N-4033 Stavanger, Norway

Tel.: +47 51 12 30 80
www.wisegroupsystems.com
post@automasjon.no

WISE Group—Muir Matheson Ltd.
31 Abercrombie Court, Prospect Road,
Westhill AB32 6FE, Aberdeen, UK

Tel.: +44 (0) 1224 001960
www.wisegroupsystems.com
post@wisegroupsystems.com