RAVEN™ 12
Thickness + Coating Sensor

The Raven™ by LiteSentry™ measures moving or stationary glass to +/-0.1 mm in real time. The non-contact glass thickness sensor mounts in any orientation on the glass line – above, below, front, or rear. Its rugged aluminum and steel housing is designed for demanding industrial environments.

The Raven provides 100% inspection and automated data collection, replacing periodic human inspection. The Raven sensor monitors glass thickness, coating, and coated side. It also can be used to conform IG make-up, including glass thickness and airspace gap.

**Features**
- LED-based spectrometer, integral electronics, and embedded algorithms
- Real-time, 100% inspection at glass velocities up to 700 mm/s
- Discriminates clear from single, double, and triple silver, and 4th surface (i89 or IS15) low-E coatings
- Thickness measurement range: 0-35.0 mm
- Accurate to +/-0.1 mm for 0-8 mm glass thickness and +/- 0.2 mm for 9-35 mm glass thickness
- Outputs: Local alphanumeric LCD display of thickness and coating and remote XML output

**RAVEN™ 12 Applications**

<table>
<thead>
<tr>
<th></th>
<th>Single Pane</th>
<th>Dual Pane IG</th>
<th>Triple Pane IG</th>
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</thead>
<tbody>
<tr>
<td>Glass Thickness</td>
<td>0-22 mm</td>
<td>0-32 mm</td>
<td>0-32 mm</td>
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<tr>
<td>Side on which low-E is present</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Low-E Coating Detection</td>
<td>Yes, on any one surface</td>
<td>No</td>
<td></td>
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<tr>
<td>Low-E Coating Discrimination</td>
<td>By type, # of AG layers, etc.</td>
<td>No</td>
<td></td>
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<tr>
<td>Substrates</td>
<td>Clear, low-E, absorbing, etc. &gt; 10% Transmission</td>
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**The Bottom Line**
The Raven confirms critical dimensions and eliminates costly errors. When quality is on the line, the Raven sees it all!
RAVEN™ 12
Integrated Controller + Alarm

Features

» Rugged steel pedestal stand for mounting the Raven sensor and Integrated Controller unit on vertical or horizontal IG lines
» Electrical NEMA enclosure with processor, 24 VDC power supply, and wiring
» ON/OFF switch, alarm light, audible alarm, reset switch
» 7-inch HMI display shows data output from Raven sensor (surface 1 / glass thickness / surface 2), documenting coatings (clear or low-E) and thickness of monolithic glass or laminate
» Allows custom, user-defined inspection criteria that trigger alarm conditions
» Power and network cables to Raven sensors included

The Complete
RAVEN™ 12 Installation

The complete Raven system includes a stand-mounted Integrated Controller + Alarm and one or more Raven Thickness + Coating Sensors. Designed for easy installation and maintenance, the Raven will detect glass thickness and coating, provide precise measurement of thickness and coatings, and sound audible and visual alarms when glass is out of conformance with user-defined criteria.