

# L-GAGE LT7 Series

## Product Specifications

<b>Supply Voltage and Current</b>	18 to 30V dc (10% max. ripple)
<b>Range</b>	<b>Diffuse:</b> 6% black card:0.5 to 3 m 18% gray card:0.5 to 7 m 90% white card:0.5 to 10 m <b>Retroreflective:</b> 0.5 to 250 m, range is specified using one model BRT-250, BRT-540 and BRT-700 retroreflector
<b>Power Consumption</b>	Less than 4.5 W @ 25° C
<b>Measuring Laser</b>	Infrared, 900 nm, Class 1
<b>Laser Control</b>	Measurement laser is ON when sensor is ON. Pilot (visible) laser enabled during Programming mode, alternates with measurement laser.
<b>Spot Size</b>	<b>Diffuse:</b> 3 x 10 mm @ 4 m, 4 x 12 mm @ 6 m, 10 x 20 mm @ 10 m <b>Retroreflective:</b> ø 20 mm @ 10 m; ø 100 mm @ 50 m, ø 200 mm @ 100 m, ø 500 mm @ 250 m
<b>Pilot Laser (Alignment)</b>	Visible red, 650 nm, Class 2
<b>Discrete and Analog Output Protection</b>	Protected against continuous overload and short circuit
<b>Discrete Output</b>	(2) 100 mA, PNP
<b>Discrete Switch Points</b>	Adjustable in 1 mm steps
<b>Discrete Output Hysteresis</b>	Adjustable, 10 mm min.
<b>Alarm Outputs</b>	50 mA, PNP (NO)
<b>Analog Output</b>	<b>Diffuse:</b> 4-20 mA <b>Retroreflective:</b> none
<b>Maximum Cable Length</b>	100 m
<b>Output Response Time</b>	12 milliseconds
<b>Linearity</b>	±10 mm
<b>Resolution/Repeatability</b>	<b>Diffuse:</b> ±4 mm <b>Retroreflective:</b> ±2 mm
<b>Color Sensitivity</b>	<b>Diffuse:</b> contact factory <b>Retroreflective:</b> not applicable
<b>Temperature Effect</b>	less than ±5 mm over the total sensing range

<b>Minimum Analog Window Size</b>	<b>Diffuse:</b> 300 mm <b>Retroreflective:</b> none
<b>Adjustments</b>	Push-button-directed password enable/disable, measurement unit select, offset value select, output limits set, output mode select, analog output slope select (diffuse models only) and output limit manual adjust. See data sheet for information.
<b>Serial Interface</b>	RS-422 or SSI compatible
<b>Serial Measurement Speed</b>	<b>SSI:</b> 1.4 milliseconds (SSI cycle 80 microseconds) <b>RS-422:</b> 2.9 milliseconds @ 57.6 kBaud
<b>Indicators</b>	2-line digital LCD display. See data sheet for more information. <b>4 LED indicators:</b> Green:Power ON/OFF Red:Alarm (Error) LED Orange:Output 1 and Output 2 conducting LEDs
<b>Construction</b>	ABS shock-resistant housing; PMMA window; polycarbonate displays
<b>Weight</b>	Approx. 230 g
<b>Environmental Rating</b>	IEC IP67
<b>Connections</b>	12-pin M16 connector; 100 m max. cable length. QD cables are ordered separately.
<b>Operating Conditions</b>	<b>Temperature:</b> -10° to +50° C in continuous operation
<b>Storage Temperature</b>	-30° to +75° C
<b>Vibration Shock</b>	EN 60947-5-2
<b>Application Notes</b>	<ul style="list-style-type: none"> <li>• All specifications are based on the specified surface at constant ambient conditions and following a minimum operating time of 15 minutes.</li> <li>• For best accuracy, allow a 15-minute warmup before programming or operating</li> <li>• <b>Crosstalk avoidance:</b> Light spots must be separated by at least 200 mm.</li> </ul>