



More Precision

scanCONTROL // 2D/3D Laser profile sensors



| Model | | LLT 30x2-430 | LLT 30x2-600 | |
|---|-----------------------------------|--|---|---------|
| Available laser type | | Red Laser | Red Laser | |
| z-axis | Measuring range | Start of measuring range | 330 mm | 530 mm |
| | | Mid of measuring range | 515 mm | 770 mm |
| | | End of measuring range | 700 mm | 1010 mm |
| | | Height of measuring range | 370 mm | 480 mm |
| | Extended measuring range | Start of measuring range | 330 mm | 450 mm |
| | | End of measuring range | 720 mm | 1050 mm |
| Line linearity ¹⁾²⁾ | | 15 μ m | 22 μ m | |
| | | ± 0.0041 % | ± 0.0045 % | |
| x-axis | Measuring range | Start of measuring range | 324 mm | 456 mm |
| | | Mid of measuring range | 430 mm | 600 mm |
| | | End of measuring range | 544 mm | 762 mm |
| | Extended measuring range | Start of measuring range | 324 mm | 408 mm |
| | | End of measuring range | 560 mm | 788 mm |
| Resolution | | 1,024 points/profile | | |
| Profile frequency | | up to 10,000 Hz | | |
| Interfaces | Ethernet GigE Vision | Output of measurement values Sensor control Profile data transmission | | |
| | Digital inputs | Mode switching Encoder (counter) Trigger | | |
| | RS422 (half-duplex) ³⁾ | Output of measurement values Sensor control Trigger Synchronization | | |
| Output of measurement values | | Ethernet (UDP / Modbus TCP); RS422 (ASCII / Modbus RTU) analog ⁴⁾ ; switch signal ⁴⁾ PROFINET ⁵⁾ ; EtherCAT ⁵⁾ ; EtherNet/IP ⁵⁾ | | |
| Control and display elements | | 3x color LEDs for laser, data and error | | |
| Light source | Red Laser | | ≤ 26 mW | |
| | | | Standard: laser class 2M, semiconductor laser 660 nm | |
| | | | ≤ 100 mW | |
| | Laser switch-off | | Option: laser class 3R, semiconductor laser 660 nm via software, hardware switch-off with /SI option | |
| Aperture angle of laser line | | 60 ° | | |
| Permissible ambient light (fluorescent light) ¹⁾ | | 5,000 lx | | |
| Protection class (DIN EN 60529) | | IP67 (when connected) | | |
| Vibration (DIN EN 60068-2-27) | | 2 g / 20 ... 500 Hz | | |
| Shock (DIN EN 60068-2-6) | | 15 g / 6 ms | | |
| Temperature range | Storage | -20 ... +70 °C | | |
| | Operation | 0 ... +45 °C | | |
| Weight | | 2620 g (without cable) | | |
| Supply voltage | | 11 ... 30 VDC, nominal value 24 V, 500 mA, IEEE 802.3af class 2, Power over Ethernet (PoE) | | |
| Connections | | Sockets, cable outlets on top (/PT) | | |

¹⁾ Based on the measuring range; measuring object: Micro-Epsilon standard object

²⁾ According to a one-time averaging over the measuring field (1,024 points)

³⁾ RS422 interface, programmable either as serial interface or as input for triggering/synchronization

⁴⁾ Only with 2D/3D Output Unit

⁵⁾ Only with 2D/3D Gateway

| Model | | LLT 30x0-430 | LLT 30x0-600 | |
|---|-----------------------------------|--|---|---------|
| Available laser type | | Red Laser | Red Laser | |
| z-axis | Measuring range | Start of measuring range | 330 mm | 530 mm |
| | | Mid of measuring range | 515 mm | 770 mm |
| | | End of measuring range | 700 mm | 1010 mm |
| | | Height of measuring range | 370 mm | 480 mm |
| | Extended measuring range | Start of measuring range | 330 mm | 450 mm |
| | | End of measuring range | 720 mm | 1050 mm |
| | Line linearity ¹⁾²⁾ | | 12 μm | 15 μm |
| | | ±0.0032 % | ±0.0031 % | |
| x-axis | Measuring range | Start of measuring range | 324 mm | 456 mm |
| | | Mid of measuring range | 430 mm | 600 mm |
| | | End of measuring range | 544 mm | 762 mm |
| | Extended measuring range | Start of measuring range | 324 mm | 408 mm |
| | | End of measuring range | 560 mm | 788 mm |
| Resolution | | 2,048 points/profile | | |
| Profile frequency | | up to 10,000 Hz | | |
| Interfaces | Ethernet GigE Vision | Output of measurement values Sensor control Profile data transmission | | |
| | Digital inputs | Mode switching Encoder (counter) Trigger | | |
| | RS422 (half-duplex) ³⁾ | Output of measurement values Sensor control Trigger Synchronization | | |
| Output of measurement values | | Ethernet (UDP / Modbus TCP); RS422 (ASCII / Modbus RTU) analog ⁴⁾ ; switch signal ⁴⁾ PROFINET ⁵⁾ ; EtherCAT ⁵⁾ ; EtherNet/IP ⁵⁾ | | |
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| Aperture angle of laser line | | 60 ° | | |
| Permissible ambient light (fluorescent light) ¹⁾ | | 5,000 lx | | |
| Protection class (DIN EN 60529) | | IP67 (when connected) | | |
| Vibration (DIN EN 60068-2-27) | | 2 g / 20 ... 500 Hz | | |
| Shock (DIN EN 60068-2-6) | | 15 g / 6 ms | | |
| Temperature range | Storage | -20 ... +70 °C | | |
| | Operation | 0 ... +45 °C | | |
| Weight | | 2630 g (without cable) | | |
| Supply voltage | | 11 ... 30 VDC, nominal value 24 V, 500 mA, IEEE 802.3af class 2, Power over Ethernet (PoE) | | |
| Connections | | Sockets, cable outlets on top (/PT) | | |

¹⁾ Based on the measuring range; measuring object: Micro-Epsilon standard object

²⁾ According to a one-time averaging over the measuring field (2,048 points)

³⁾ RS422 interface, programmable either as serial interface or as input for triggering/synchronization

⁴⁾ Only with 2D/3D Output Unit

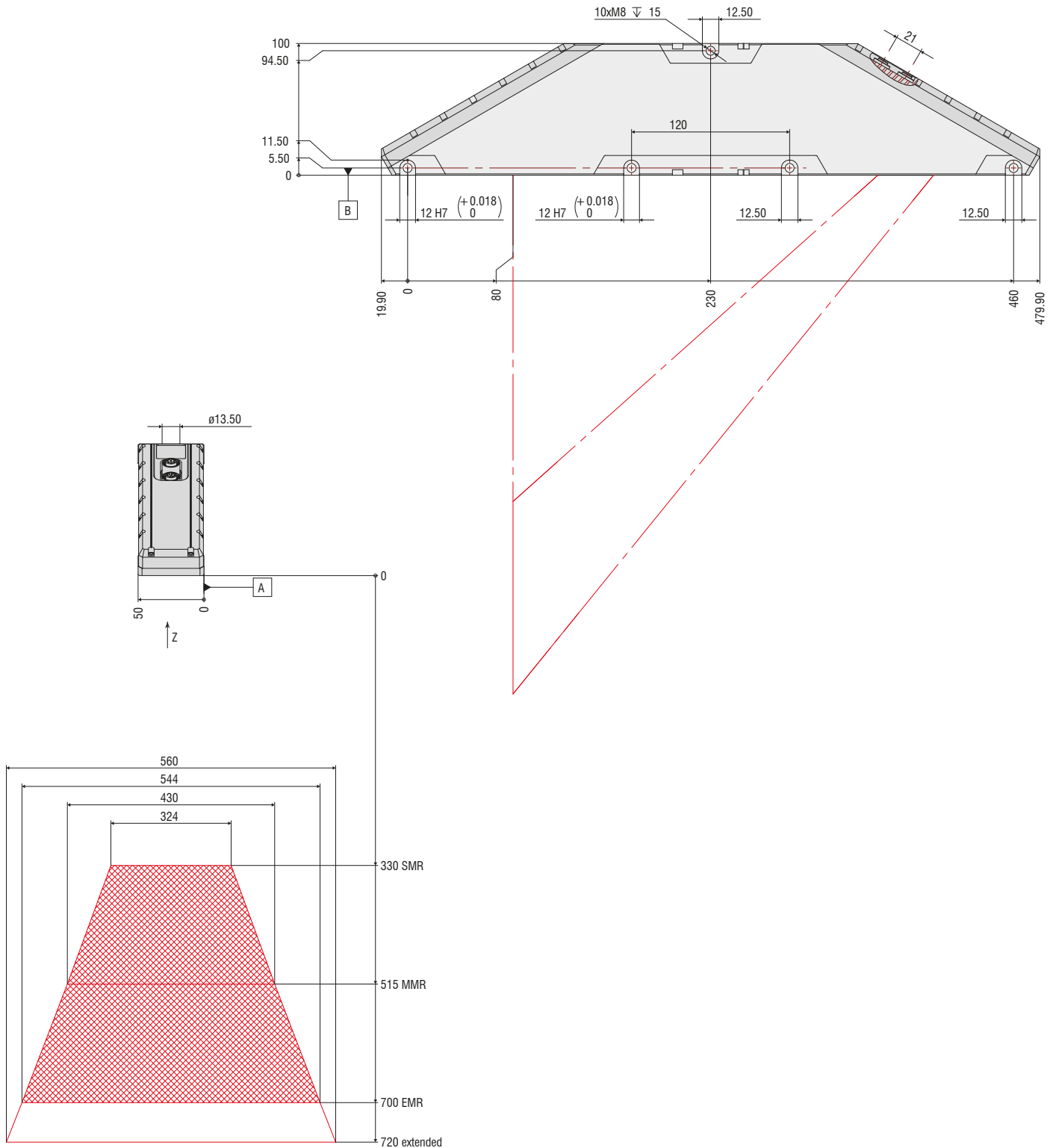
⁵⁾ Only with 2D/3D Gateway

Dimensions and measuring ranges

scanCONTROL 30xx

LLT30x2-430 / LLT30x0-430

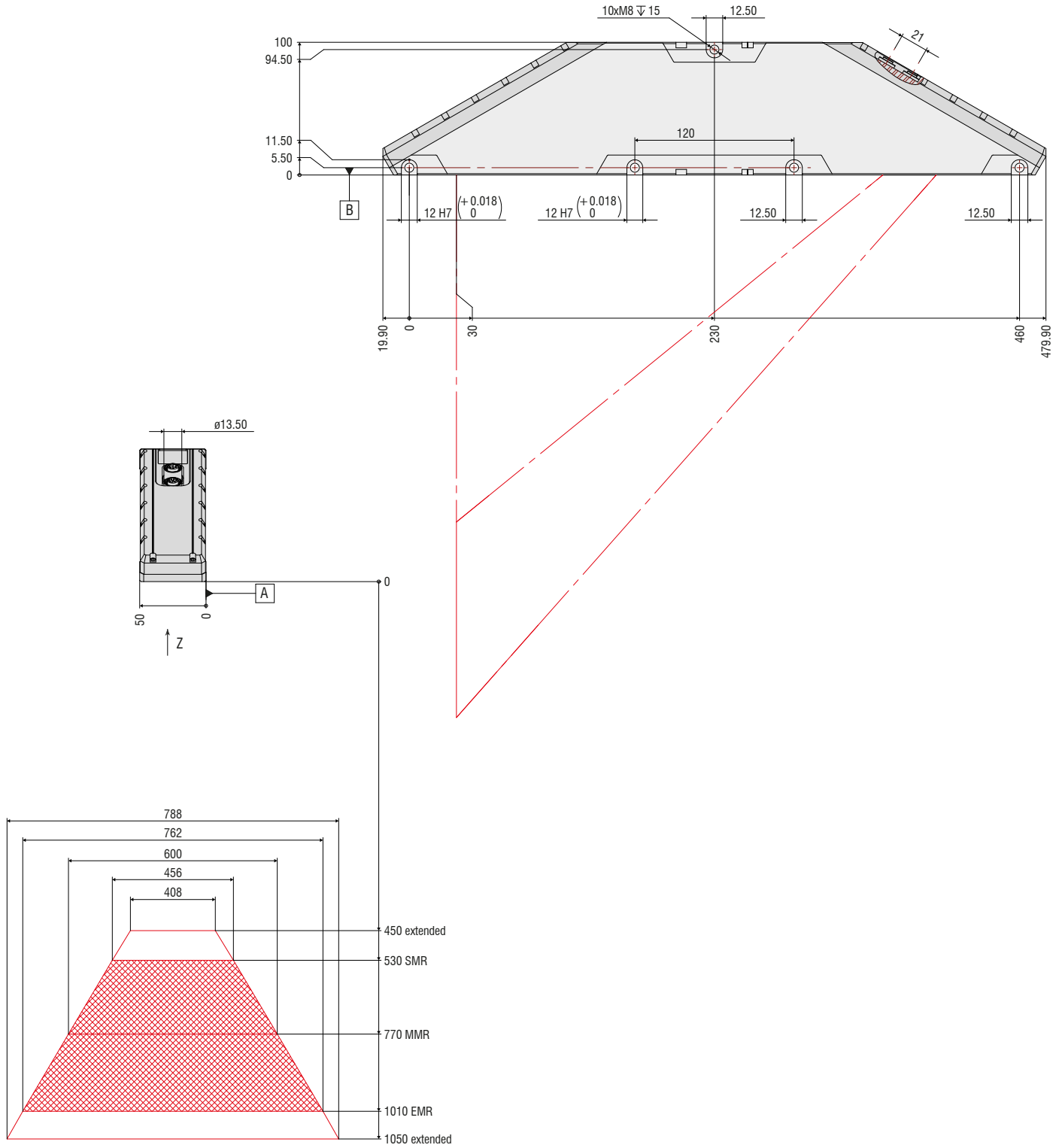
Red Laser



(dimensions in mm, not to scale)

LLT30x2-600 / LLT30x0-600

Red Laser



(dimensions in mm, not to scale)

Sensors and Systems from Micro-Epsilon



Sensors and systems for displacement, position and dimension



Sensors and measurement devices for non-contact temperature measurement



Measuring and inspection systems for quality assurance



Optical micrometers, fiber optics, measuring and test amplifiers



Color recognition sensors, LED Analyzers and inline color spectrometers



3D measurement technology for dimensional testing and surface inspection

