

## Advanced lift station control for water and wastewater industry

### SITRANS LUC500

- Fixed and rotating pump rosters
- Screen rake automation
- Influent and effluent monitor
- Sampler control
- Open channel flow monitor
- Remote telemetry
- Real time clock
- Data logger
- Level-to-volume conversion
- Pump interlock feedback
- Report by exception
- Wall, rack or panel mount versions
- AC and DC versions



# sitrans LUC500

SITRANS LUC500 provides high-end control for duplex lift stations and wet wells. It uses ultrasonic technology with patented Sonic Intelligence<sup>®</sup> echo-processing and energy-saving algorithms for accurate monitoring and control of liquid levels up to 15m (50 ft), and liquid flow in flumes, weirs, or open channels. SITRANS LUC500's advanced pump control features provide increased return on investment by reducing energy consumption, maintenance costs and minimizing site visits.

[www.siemens.com/level](http://www.siemens.com/level)

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# Technical specifications

SITRANS LUC500	
<b>Power</b>	
AC	100 to 230 V AC $\pm$ 15%, 50/60 Hz
DC	12 to 30 V DC, 20W
<b>Performance</b>	
Measurement range	0.3 m to 15 m (1 to 50 ft) dependent on transducer
Accuracy	0.25% of maximum range or 6 mm (0.24"), whichever is greater
Resolution	0.1% of program range or 2 mm (0.08"), whichever is greater
<b>Interface</b>	
Display	Back-lit LCD
Programming	<ul style="list-style-type: none"> <li>■ Handheld programmer</li> <li>■ PC running Dolphin Plus software</li> </ul>
<b>Outputs</b>	
Relays	5 relays, rated 5 A at 250 V AC, non-inductive <ul style="list-style-type: none"> <li>■ Wall mount: 4 Form A SPST, 1 Form C SPDT</li> <li>■ Rack or panel mount: 4 Form A SPST, 1 Form B SPST</li> </ul>
mA output	Optional only with aux. I/O cards: 0/4 to 20 mA, 750 $\Omega$ max. loading, 0.1% linearity, isolated
Communication	<ul style="list-style-type: none"> <li>■ RS-232 using Siemens Milltronics Dolphin protocol</li> <li>■ RS-232 using Modbus<sup>®</sup> RTU and ASCII</li> <li>Optional:</li> <li>■ PROFIBUS DP, Allen-Bradley<sup>®</sup> RIO, DeviceNet<sup>™</sup> via SmartLin<sup>x</sup></li> <li>■ RS-485 (available with auxiliary I/O cards)</li> </ul>
<b>Inputs</b>	
Analog	0 to 20 or 4 to 20 mA, from alternate device, scalable
Discrete	10 to 50 V DC switching level; logical 0 $\leq$ 0.5 V DC; logical 1 = 10 to 50 V DC; 3 mA max. draw
<b>Auxiliary I/O cards</b>	
Options	<ul style="list-style-type: none"> <li>■ 2 analog inputs / 2 analog outputs</li> <li>■ 4 analog inputs</li> <li>■ 4 analog outputs</li> <li>■ 8 digital inputs</li> <li>■ 8 digital inputs / 2 analog inputs / 2 analog outputs (wall mount only)</li> </ul>
<b>Mechanical</b>	
Enclosure	<ul style="list-style-type: none"> <li>■ Rack Mount: DIN 3U/21 HP, 4-rail plug-in unit suitable for standard 3U/84HP (19") sub rack</li> <li>■ Wall Mount: Type 4X/NEMA 4X/IP65, polycarbonate</li> <li>■ Panel Mount: Suitable for DIN43700 72x144 standard panel cut-out on 110 mm (4.33") centers</li> </ul>
<b>Process conditions</b>	
Ambient temperature	-20 to 50 °C (-4 to 122 °F)
<b>Compatible Transducers</b>	
	Echomax <sup>®</sup> and ST-H series
<b>Approvals</b>	
	CE, CSA <sub>NRTL/C</sub> , UL Listed

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# Million in one

## Signal processing with field experience

Siemens level measurement instruments come with extensive field experience. Siemens Milltronics developed the signal processing technology for level instruments based on the experience of a million instruments in industrial applications.

With this experience, we understand the importance of reliability, and we know what it takes to make a trusted and accurate level instrument for demanding applications. That's why our engineers invented Sonic Intelligence and why these instruments carry so many patents. With Siemens Milltronics, you get the experience of a million applications in one instrument.

