

Remote Control Units LCR

- ◆ OPERATE ONLY WITH LCSUL/S LEVEL SENSORS
- ◆ Form 2-part ultrasonic level measurement system
- ◆ Up to 8 measuring points
- ◆ Current and relay outputs
- ◆ Level/Volume/Flow metering
- ◆ QUEST+™ software for advanced signal processing
- ◆ RS485 optional serial interface

The LCP remote control units plus LCSUL/S sensors form a complete level measurement system. The **Two-Part Measurement System** consists of sensors based on the latest SenSonic™ transducer technology of NIVELCO and a highly sophisticated **Remote Control Unit**. This powerful system, is capable of measuring the level of practically any powder or bulk solid, even under most difficult circumstances such as dusting of powders caused by pneumatic filling etc. Due to its excellent signal processing feature the software QUEST+™ (Qualified Echo Suppression Technique PLUS) the system provides solution for applications for which the Compact Transmitters are not „smart enough“. In addition to being able to perform very accurate and reliable distance measurements, the Two-Part Measurement System provides additional features such as programmable relays, isolated analogue output, RS485 computer interface for remote programming and data acquisition. The users can „customise“ the information provided by the Remote Control Unit. Using the LCR8 **Remote Scanner** connected to the LCR1 control unit, up to 8 identical sensor can be scanned. The **RS485** interface option provides comfortable remote programming, control and data acquisition possibilities. **Ex-proof** version of the remote control units is also available.



Technical specifications

LC

Model	LCR1	LCR2	LCR4	LCR8
Specification				
Function	Remote control unit	Remote control unit		8-channel scanner
Input channels	1	1	2	8
Sensors connected	1	1	2	Up to 8 identical LCSUL/S
Resolution	Up to 2m: 1mm; Up to 5m: 2mm; Up to 10m: 5mm; Above 10m: 10mm			
Repeatability	0.25 % of span	0.25 % of span		-
Mounting	Panel mounting	Wall mounting		Panel mounting
Analog output	Isolated 0/4...20 mA; max. 500Ω	1 (same as LCR1)	2 (same as LCR1)	"Poled sensor output" LO= 0...2 V, 1.6 mA, HI= 6...8 V, 1.6 mA
Relay outputs	Up to 3 SPDT-8A/250VAC	Up to 8 SPDT-8A/250VAC		-
Serial interface	RS485	RS485		-
Power supply	24V, 110V, 230 V AC, 50...60 Hz, -10...+10%			
Consumption	< 10 VA	< 12 VA (20 VA for self heating version)		< 35 VA
Dimensions BxHxD	72x144x157 mm	264x230x102 mm		72x144x157 mm
Ambient temperature	0 to 50 °C	-20 to 50 °C; self regulating heating (option)		0 to 50 °C
Enclosure protection	IP40 (front)	IP54		IP40 (front)
Lockable cover (option)	IP54 (front)	IP56		IP40 (front)
Weight	0.9 kg	2 kg		1.25 kg
Ex - proof (option)	EEx ia IIB	EEx ia IIB		-

Ordering code



LCR* - G1.G5.G9.G11 - #1#2#3

Code	Feature or option	Code values
*	Remote unit model	1 - panel mounting control, 2 - wall mounting controller, 8 - panel mounted scanner
G1	Power Supply type	A - 220 VAC, B - 110 VAC, D - 24 VDC, E - 24 VAC
G5	Relay output type	X - none, 1C...8C - number of relay available for the selected model
G9	Serial interface	X - none, B - RS485
G11	Analog output type	X - none, 1A or 2A - number of current outputs available (not concern LCR8)
#1	'Self heating' option	X - none, H - self regulating heating option mounted ⁽¹⁾
#2	'Lockable cover' option	X - none, L - lockable transparent cover, T - non-lockable transparent cover ⁽¹⁾
#3	'Ex-proof' option	X - none, E - EEx ia IIB certified

⁽¹⁾ Availability ONLY with LCR2/4 models!