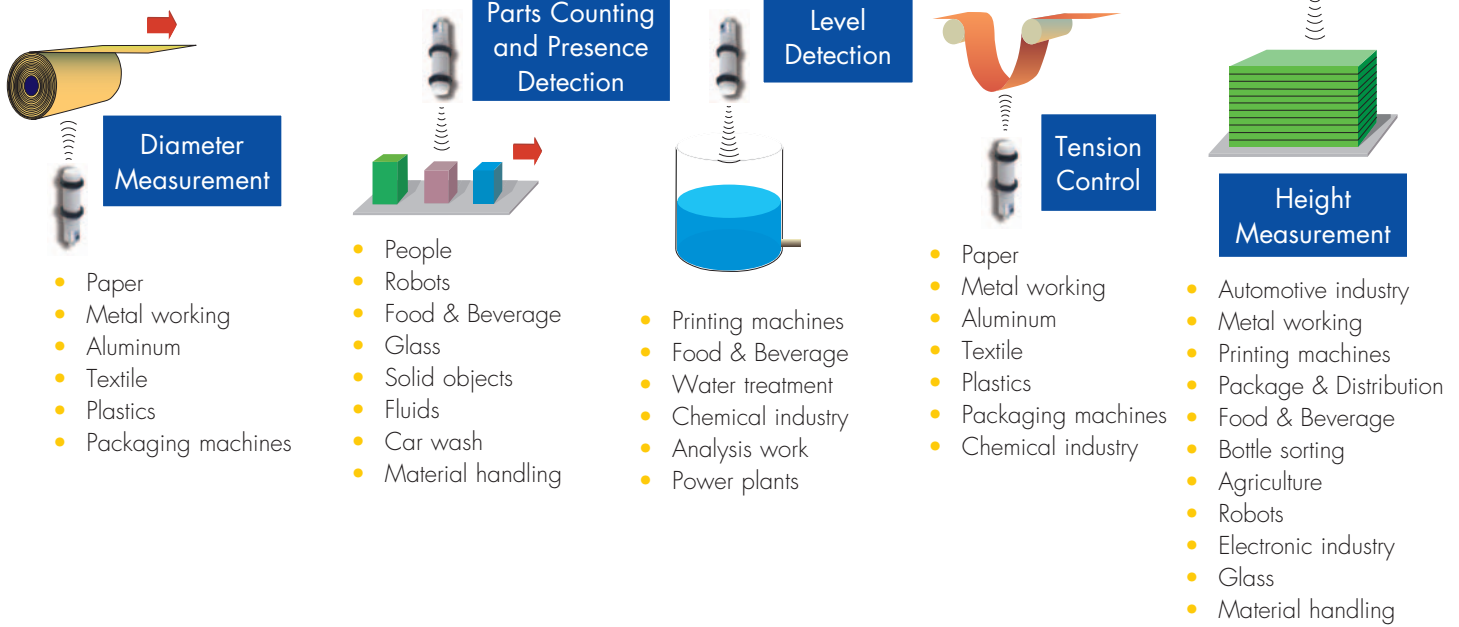


Ultrasonic Sensors

- *Transistor Output*
- *Analog Output*
- *Teach Mode - Pushbutton Programmable*
- *Windows Programmable*
- *Extended Sensing Range*



Applications for Ultrasonic Sensors



Basic and Wire Programmable - Transistor Output

M12, M18, M30, 80x80 Transistor Output, NPN or PNP

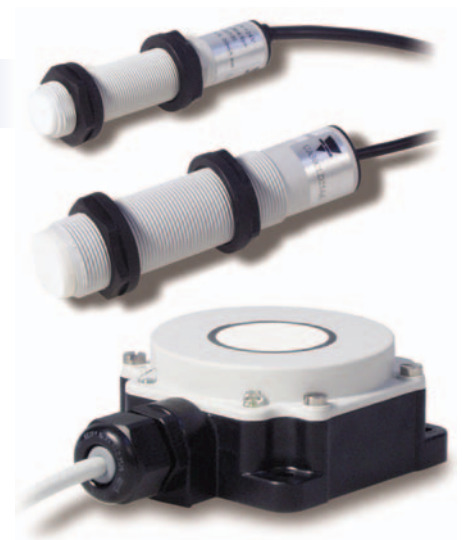


- 32 model numbers
- Microprocessor-controlled
- Excellent repeatability
- Detection range from 60 mm to 6m
- Integrated digital filter
- Sensitivity adjustment by potentiometer or wire
- Synchronization by wire
- One and two switching outputs
- Diffuse-reflective
- Through-scan detection
- DC Supply Voltage
- Load 100mA & 500mA
- IP65 / IP67
- M12: Plug versions
- M18: Cable or pig tail versions
- M30: Cable or plug versions
- 80 x 80: Plug versions

Basic and Wire Programmable - Analog Output

M18, M30, 80x80 Analog Output, 0-10 VDC or 4-20 mA

- 30 model numbers
- Microprocessor-controlled
- Excellent repeatability
- Detection range from 60 mm to 6m
- One analog output
- Synchronization output
- DC Supply Voltage
- 0-10 VDC or 4-20 mA output
- Linearity error < 0.3 % (0.5% for 80x80)
- IP65 / IP67
- Cable or plug versions
- M18, M30 and 80 x 80 housings



Teach Mode - Pushbutton Programmable

M30, Analog Output 0-10 VDC or 4-20 mA M30, Transistor Output PNP

- Microprocessor-controlled
- Excellent repeatability
- Detection range 1500, 2000 or 3500 mm
- 2 set points PNP, NO or NC
- Analog outputs (AK and AG types)
- Transistor output PNP (PO type)
- Positive or negative slope
- Supply 18-30 VDC
- Analog output 0-10 VDC or 4-20 mA or transistor PNP output
- Linearity error < 0.3 %
- IP67
- Plug versions

Teach Mode



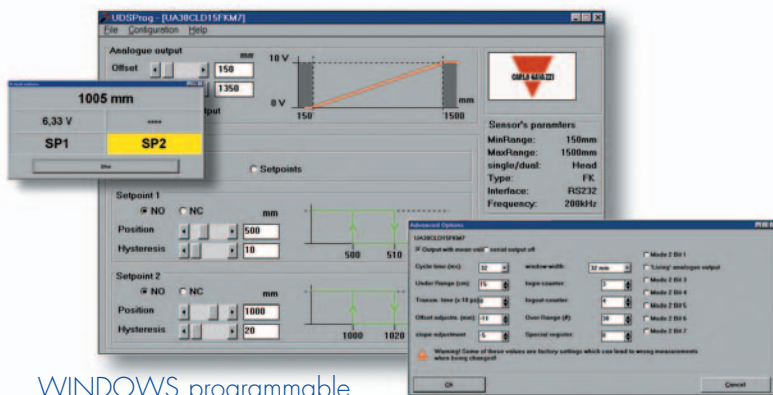
Windows Programmable

M30, RS 232

- Microprocessor-controlled
- Excellent repeatability
- Detection range 1500, 2000, 2500 mm
- Programmed parameters, see "Programmable Functions"
- Diffuse or through-scan settings



- Supply 18-30 VDC
- 2 set points PNP, 100 mA
- Analog output: 0-10 VDC or 4-20 mA
- Linearity $\leq$ 0.3 %
- IP67



Programmable Functions

- Sensor address
- Analog output offset, range, positive or negative slope
- 2 set points - actual values in mm
- NO or NC settings
- Hysteresis
- Digital output, BCD or HEX
- Cycle time
- Over and under range detection
- Transmitting time
- Offset
- Slope

Extended Sensing Range

80 x 80 mm Sensor Head for Separate Amplifier

- Microprocessor-controlled
- Excellent repeatability
- Detection range 8000 mm
- 2 set points
- Over range output
- Under range output
- Analog output 0-10 VDC
- Analog output 4-20 mA
- Digital output BCD or HEX
- Supply 18-30 VDC
- Square 80 mm housing
- Linearity error $\leq$ 0.5 %
- IP67 (sensor head)
- IP20 (amplifier)



Specifications are subject to change without notice.

Model Number Selection - Ultrasonic Sensors

	Size	Output	Distance	Ordering key
Basic	Diffuse Transistor Output	M18 NPN, Normally Open	100-600 mm	UA18CLD06NOxx
		M18 PNP, Normally Open	100-600 mm	UA18CLD06POxx
		M18 NPN, Normally Open	200-1500 mm	UA18CLD15NOxx
		M18 PNP, Normally Open	200-1500 mm	UA18CLD15POxx
		M30 NPN, Normally Open	300-2500 mm	UA30CLD25NOxx
		M30 PNP, Normally Open	300-2500 mm	UA30CLD25POxx
	Diffuse Analog Output	M18 Analog, 0-10 VDC	100-600 mm	UA18CLD06AKxx
		M18 Analog, 0-10 VDC	200-1500 mm	UA18CLD15AKxx
		M30 Analog, 0-10 VDC	300-2500 mm	UA30CLD25AKxx
		M18 Analog, 4-20 mA	100-600 mm	UA18CLD06AGxx
		M18 Analog, 4-20 mA	200-1500 mm	UA18CLD15AGxx
		M30 Analog, 4-20 mA	300-2500 mm	UA30CLD25AGxx
	Through Scan	M18 PNP, Normally Open	100-600 mm	UA18CLS06POM1
		M18 PNP, Normally Open	200-1500 mm	UA18CLS15POM1
		M30 PNP, Normally Open	300-2500 mm	UA30CLS25POM1
Programmable	Push Button	M30 Analog, 0-10 VDC	150-1500 mm	UA30CLD15AKM1TI
		M30 Analog, 0-10 VDC	250-2000 mm	UA30CLD20AKM1TI
		M30 Analog, 4-20 mA	250-2000 mm	UA30CLD20AGM1TI
		M30 PNP, Normally Open	250-2000 mm	UA30CLD20POM1TI
		M30 Analog, 0-10 VDC	350-3500 mm	UA30CLD35AKM1TI
	Wire Programmable	M12 PNP, Normally Open or Closed	25-200 mm	UA12CLD02PPM1TR
		M12 NPN, Normally Open or Closed	25-200 mm	UA12CLD02NPM1TR
		M18 2 x PNP, Normally Open or Closed	60-500 mm	UA18CLD05PPxxTR
		M18 2 x NPN, Normally Open or Closed	60-500 mm	UA18CLD05NPxxTR
		M18 2 x PNP, Normally Open or Closed	100-800 mm	UA18CLD08PPxxTR
		M18 2 x NPN, Normally Open or Closed	100-800 mm	UA18CLD08NPxxTR
		M18 2 x PNP, Normally Open or Closed	200-2000 mm	UA18CLD20PPxxTR
		M18 2 x NPN, Normally Open or Closed	200-2000 mm	UA18CLD20NPxxTR
		M30 2 x PNP, Normally Open or Closed	300-3500 mm	UA30CLD35PPxxTR
		M30 2 x NPN, Normally Open or Closed	300-3500	UA30CLD35NPxxTR
		M18 Analog, 0-10 VDC	60-500 mm	UA18CLD05AKxxTR
		M18 Analog, 4-20 mA	60-500 mm	UA18CLD05AGxxTR
		M18 Analog, 0-10 VDC	100-800 mm	UA18CLD08AKxxTR
		M18 Analog, 4-20 mA	100-800 mm	UA18CLD08AGxxTR
		M18 Analog, 0-10 VDC	200-2000 mm	UA18CLD20AKxxTR
		M18 Analog, 4-20 mA	200-2000 mm	UA18CLD20AGxxTR
		M30 Analog, 0-10 VDC	300-3500 mm	UA30CLD35AKxxTR
		M30 Analog, 4-20 mA	300-3500	UA30CLD35AGxxTR
		80 x 80 2 x PNP, Normally Open or Closed	600-6000 mm	UC80CND60PPM1TR
		80 x 80 2 x NPN, Normally Open or Closed	600-6000 mm	UC80CND60NPM1TR
		80 x 80 Analog, 0-10 VDC	600-6000 mm	UC80CND60AKM1TR
		80 x 80 Analog, 4-20 mA	600-6000 mm	UC80CND60AGM1TR
	Windows	M30 Analog, 0-10 VDC	150-1500 mm	UA30CLD15FKM7
		M30 Analog, 0-10VDC	250-2000 mm	UA30CLD20FKM7
		M30 Analog, 0-10 VDC	350-3500 mm	UA30CLD35FKM7
		M30 Analog, 4-20 mA	150-1500 mm	UA30CLD15FGM7
		M30 Analog, 4-20 mA	250-2000 mm	UA30CLD20FGM7
		M30 Analog, 4-20 mA	350-3500 mm	UA30CLD35FGM7
	Separate Amplifier	80 x 80 Remote Amplifier Amplifier for UC80. Outputs: 0-10 VDC, 4-20 mA, RS 232, 2x PNP NO/NC	800-8000 mm	UC80CND80FSM1 UCEU80-1

Ultrasonic Brochure 5/05

Your Authorized Distributor:

CARLO GAVAZZI
Automation Components

USA Phone: 847.465.6100 Fax: 800.222.2659

Canada Ontario: 905.542.0979 Quebec: 514.644.2544

Website www.GavazziOnline.com

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Gross Automation (877) 268-3700 · www.carlogavazzisales.com · sales@grossautomation.com