

Specifications

Transducer compatibility: Any frequency from 10 KHz to 45 KHz

Display: Large, back lit alphanumeric liquid crystal, two lines of 16 characters, user programmable IDs, selectable bar graph display or engineering units format

Programming and Parameter Entry: Integral 24-key sealed membrane tactile keypad

Set-up: Menu-driven prompts

Memory: Non-volatile RAM, common isolation parameter storage

Built-in Serial Communication: RS-422, RS-485, (optical isolation standard), 1200, 2400, 4800, 9600 or 19.2 K baud; designed for multi-drop single cable connection

Option cards*

Scanner options: For multiple channel expansion; available with 2, 4, 6, or 8 relays; first scanner card must be full 8 to use a second scanner card; maximum of two scanner cards per ultra-wave™.

PLC Interface option: Allen-Bradley RIO - 32 channel block transfer, 6 channel discreet transfers; Profibus-DP Slave

Relay Output option: Form "C" SPDT, programmable, 10 A 110 VAC, 8 A 230 VAC non-inductive, 10 A 30 VDC; available as plug in modules of 2, 4, 5 and 8 relays each

Point Level Input: 5V @ 5mA, voltage provided for contact inputs. This offers maximum protection for the process with fail-safe on disconnect. These point level input modules are compatible with the majority of the devices available on the market today, available as plug in module of 16 inputs

4-20 mA Output option: Isolated 600 ohms maximum or externally powered to 1000 ohms, 12 bit resolution; available as plug in modules of 1, 2, 4 and 8 outputs with common isolation; must be installed in third option slot

Combi-Card option: One combi-card per unit; combinations are 2 relays, 1 current; 4 relays, 1 current; 2 relays, 2 currents; or 4 relays, 2 currents

*A maximum of three plug-in option cards can be added

Electrical:

Voltages: 100 VAC 50/60 Hz, 110/230 VAC (+/- 10%) 50/60 Hz or 24 VDC

Power requirement: 20 VA

Environmental:

Operating Temperature: -5° to 122° F (-20° to 50° C)

Storage Temperature: -22° to 140° F (-30° to 60° C)

Humidity: 1% to 95% (non-condensing)

Enclosures: NEMA 4X fiberglass reinforced polyester (FRP) with 24-key, sealed elastomer keypad, NEMA 4X stainless steel and optional mild steel NEMA-4 for CE version. ultra-wave™ has NEMA 4X compression molded fiberglass, reinforced polyester and a silicon door gasket.

Physical:

Dimensions:

FRP: 12.0 in. (305 mm) x 10.75 in. (273 mm) x 5.62 in. (143 mm)

Stainless Steel: 12.0 in. (305 mm) x 10.0 in. (254 mm) x 6.0 (152 mm)

Weight: 12 pounds (5.45 kg)

Sonocell & ultra-cell™ Versatility and Durability:

The Sonocell and ultra-cell™ transducers are components of the ultra-wave™. KM transducers are designed to perform in a wide-range of environments, including caustics and other demanding conditions. KM will design your system solution to include the appropriate transducer for your specific application and environment. You are assured of superior performance and long-term satisfaction. KM offers some of the most versatile and powerful transducers in the industry. Our transducers have an accuracy of 1% of rated span in approved bulk solids applications and 0.25% of rated span in approved liquid applications. Available in frequencies of 14kHz, 22kHz, 24 kHz and 43kHz to fit a variety of materials and distances.

KM's Sonocell has a CPVC body with a TFE face and a Viton seal while the ultra-cell™ has a PVC body and face. They are mounted using a 1-inch NPT thread. For sanitary and hazardous bulk solids material, KM offers either a 304 stainless steel body with TFE or stainless face and a Viton seal. For hazardous liquids, KM offers the transducer mounted in an ANSI standard flange with a full seamless face of TFE.

The ultra-wave™ system can be supplied with external or internal optional temperature probes to correct for changes in the speed of sound when higher accuracies are required.

TRANSDUCER SPECIFICATIONS

	NOMINAL RANGE LIQUIDS	NOMINAL RANGE SOLIDS	MINIMUM RANGE	TEMPERATURE RANGE	WEIGHT	FREQUENCY	BEAM ANGLE
SC43PT	25' (7.6m)	15'+(4.6m)	12" (305mm)	-40° to 180°F (-40° to 82°C)	1.2 lbs (0.5 kg)	43KHz	12° included
SC43PT2	25' (7.6m)	15'+(4.6m)	12" (305mm)	-40° to 180°F (-40° to 82°C)	1.2 lbs (0.5 kg)	43KHz	12° included
SC43ST	25' (7.6m)	15'+(4.6m)	12" (305mm)	-40° to 230°F (-40° to 110°C)	1.2 lbs (0.5 kg)	43KHz	12° included
SC43SS	25' (7.6m)	15'+(4.6m)	12" (305mm)	-40° to 230°F (-40° to 110°C)	1.2 lbs (0.5 kg)	43KHz	12° included
SC43TF	25' (7.6m)	Not applicable	12" (305mm)	-40° to 160°F (-40° to 71°C)	7.2 lbs (3.3 kg)	43KHz	12° included
SC22PT	50' (15.2m)	30'+(9.2m)	24" (610mm)	-40° to 180°F (-40° to 82°C)	3.1 lbs (1.4 kg)	22KHz	12° included
SC22ST	50' (15.2m)	30'+(9.2m)	24" (610mm)	-40° to 230°F (-40° to 110°C)	6.0 lbs (2.7 kg)	22KHz	12° included
SC22TF	50' (15.2m)	Not applicable	24" (610mm)	-40° to 160°F (-40° to 71°C)	7.3 lbs (3.3 kg)	22KHz	12° included
UC24	100' (30.5m)	50' grains 100' plastics	24" (610mm)	-40° to 160°F (-40° to 71°C)	13.0 lbs (5.9kg)	24 KHz	5° included
SC14PT	125' (38.1m)	100'+(30.5m)	36" (914mm)	-40° to 180°F (-40° to 82°C)	5.75 lbs (2.6 kg)	14KHz	12° included

Transducer Selection by Product

