#### **Field Indicators & Controllers**





- MODBUS RTU communications
- Ability to read 8 ea. 4-20 mAdc inputs and 4 ea. pulse inputs
- Relay outputs with adjustable dead band Output relays may be set-up for variations in pulse width and
- time between pulses Automated sensor calibration, menu driven set-up, PC
- configurable, tag names
- Display digits in any engineering units
- Universal supply voltage: 8-30 VDC and 120 VAC std. ■ 2 ea. 4-20 mAdc programmable outputs

9 Relay supervisory or summary alarm



**Digital Process Monitor** ■ 5 digit digital display Displays process variable

in engineering units
2-alarm setpoints with





- Two ranges of zero and span allows calibration in
- Operating power derived from current loop 2.5 volt maximum voltage drop
- Large 3/4 inch, 3.5 digit liquid crystal display
- NEMA 4X or explosion-proof versions
- Designed and constructed to FM, UL, NEMA and ANSI / ISA quidelines

### CHUTE MASTER"

programmable hysteresis

■ NEMA 4X/IP65 front panel standard

analog signal input

Accepts 0-5V, 0-10V, 1-5V, 4-20mA or 0-20mA

■ NEMA 4X and explosion proof enclosure option

Optional RS422 or RS323 serial communication

Available with several input power options

■ +24V output available for loop power

- Non-contact Microwave Switch
- Blocked chute detection
- Point level detector Not affected by dust or particle build up
- **3** 33 ft. (10 m) range
- 110/220Vac or 24Vdc supply
- Configurable relay output with on/off delay
- Adjustable gain setting
- Optional flanged mounting bracket

# lectro-Mechanical Continuous

## Measurement System

- Plumb bob device
- Appropriate for nearly all kinds of bulk solids
- Insensitive to changes in product density, dust in the silo, changes in moisture of the material and products that are inclined to stick
- Very simple installation and set-up
- Very accurate measurement
- Internal tape cleaner (tape version)
- Variety of sensor weights Robust die cast housing
- Two versions: rope and tape



# KIEK

# KIEK

## Providing Level Solutions: Anytime, Anywhere.



## www.kteksolidslevel.com



K-TEK Solids Level 6100 West by Northwest #140 Houston, TX 77040 USA Tel: (1) 713.462.7665 | fax: (1) 713.462.7684 www.kteksolidslevel.com



### THE GLOBAL LEADER IN LEVEL DETECTION

















K-TEK

Is a leading global manufacturer of state-of-the-art instrumentation for bulk solids and liquids level detection. The company has over 350,000 installations worldwide in such applications as: pulp and paper processing, mining and construction, food and beverage manufacturing, oil and gas production and chemical processing. K-TEK operates offices, service locations, and R&D facilities

around the world.

K-TEK focuses its extensive engineering, manufacturing and applications expertise exclusively in the area of level measurement. Year after year, the company pushes the leading edge of technological innovation. With its consistent commitment to R&D, it boasts one of the largest investment per revenue ratio of any level company in the world.

K-TEK is also committed to the highest degree of product quality and customer service, which is exemplified in the solutions oriented approach that is taken with each individual customer. K-TEK is set apart from the competition by its ability to design and manufacture equipment for some of the toughest industry applications. The company continues to solidify its position as the world leader in level detection by introducing Ultrasonic Level Measurement devices incorporating GAP technology.

**INDUSTRIES SERVED** 

**PULP & PAPER PROCESSING** 

MINING

**FOOD & BEVERAGE** 

**PLASTICS** 

**ROCK, SAND & GRAVEL** (Aggregates)

> CHEMICAL **PROCESSING**

### **Paddle Switch**



- Drop-in replacement for existing rotary paddle switches
- Variety of paddles for differing densities
- Mounting for side or top of silo / bin
- 120 or 240 operating voltage
- Non-contact, double shielded bearings ■ Shaft lip seal rated to 140 psi / 9.7 bar
- 0-ring gland seal on shaft to keep out moisture
- Optional shaft extensions and guards to 20 ft. (6 m) ■ Two 20 amp, SPDT switch

KCAP300°

RF Capacitance Switch with

■ KSHIELD™ sensing probes and single

Electronics that provide immunity to

Integral and remote electronics

Easy set-up via external magnet or

■ Element sensitivity down to 0.5 pF

■ Wide variety of sensing probes to 450°F/

Liquids and bulk solids

push buttons

Single point detection

Optional explosion-proof housing and indicator light

**RF Level Controls** 



Maintenance free

No calibration required

## **Vibrating** Level

**Switches** 

- Self cleaning ■ Robust fork design with pantented piezo crystal sensing element
- Options for mounting plate / flange Extensions up to 156 inches (3962 mm)
- Acceptable for most powders and granulated materials down to 1.3 PCF



5P60 /ibrating Level Switch Interface Measurement for Solids in Liquids

- Detects solids in water / liquids Accepts universal input voltage
- Modular and simple design
- No calibration required
- Robust fork design with patented piezo crystal sensing element
- Options for mounting plate / flange
- Extensions up to 156 inches (3962 mm)
- Optional general purpose indicator light available

Compact All Star II RF Level Switch

- KSHIELD™ Sensing Probes & Single Totally potted electronics **Setpoint Electronics** 
  - Vibration resistant DPDT relay
  - Ambient temperatures up to
  - 450°F (232°C) NEMA 4 enclosure

  - 5, 10 or 15 second time delay





- Built-in static protection
- DPDT relav

450°F (232°C)

- Rugged probe designs Ambient temperatures up to
- Explosion-proof enclosure
- 5, 10 or 15 second time delay



- Remote mounting up to 50 ft / 15 m
- Built-in static protection
- DPDT relay
- Ambient temperatures up to 450°F / 232°C
- Explosion-proof enclosure 0 to 30 second time delay
- Temperature compensation
- Switching capacitance of 0.2 picofarads





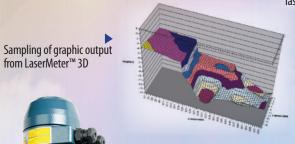


Dust tubes are available

in stainless steel or

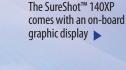


Hand-held programmer plugs directly into LM80 and LM200 laser transmitters





- 3D Laser surface profiling
- Integral laser pointer for alignment Diagonal measuring range: 5 ft (1.5m) to 115 ft (35m)
- Volume & level measurement of any complex shape
- Inventory measured in less than 5 min
- No routine maintenance
- Quick and easy installation







- Long Range to 240 ft / 75 m
- No beam divergence = no false echoes
- Explosion-proof dual compartment enclosure ■ Built-in laser pointer
- Easy set-up: push buttons or HART protocol
- Local LCD display indication

Measures level, distance and position over extreme environments Long Range to 500 ft. / 150 m (positioning)

applications) and up to 100 ft. / 30 m (level applications)

LINSO

Laser Level Transmitter:

- No beam divergence = no false echoes
- Measures any surface at any angle with narrow beam
- Ideal for plastic pellets, grain silos, food processing industry, crushers & rock silos, indoor/outdoor positioning applicationsoverhead crane, tripper cars
- Built-in purge port (1/8"FNPT)
- Last pulse detection for measurement with light dust



**Laser Level Transmitter:** Distance measuring instrument used

- in process control systems ■ Range up to 200 ft / 60 m (level applications) and up to 1312 ft / 400 m (position-
- No beam divergence = no false echoes
- Measures any surface at any angle
- Rugged and robust enclosure Last pulse detection for measurement with
- light and moderate dust Accepts 110/220 VAC and +24VDC input voltages
- Built-in laser pointer

ing applications)









#### Laser Level Transmitter: **Measures Level and Distance in Challenging Environments**

- Measures any surface at any angle



Model KSONIK I

Range to 50 ft. / 15 m

Integrated KSCOPE software

Automatic variable GAP for difficult applications

KSONIII)

**Ultrasonic Transmitter** 

**Transducer** 

Model | K60

Long Range

Range 195 ft. / 60 m

176°F -(20 to 80°C)

■ Temperature Range -4 to

ALARM RELAY

**TILT MASTER** 

Graphic LCD display

Open channel flow

■ Trend recorder



#### KSOMIM Model | KSONIK III

- Long range up to 195 ft. / 60 m
- Graphic LCD display
- Single or dual channel configuration
- Automatic variable GAP for difficult applications
- Trend recorder



KSONIKO **Ultrasonic Transmitter** Transducer Model K10F

- Solids Applications Range to 50 ft/15 m
- Temperature Range -4 to 176°F (-20 to 80°C)



■ Range to 100ft./30 m ■ Temperature Range -4 to 176°F AID (20 to 80°C) **Ultrasonic Flow Switch for** 

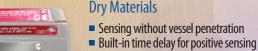
KSONIKO

**Ultrasonic Transmitter** 

■ Medium Range with Dust

Transducer

Model K20H



- Explosion-proof enclosure
- Adjustable to reject background noise Operates at 40KHz, which ignores audible noise and plant interferences
- SPDT relay

#### TILT MASTER

- Tilt master can be connected to motor control circuit Output of 8 amp relay 220Vac
- Delay and a hold circuit to stop false errors
- Delay time: 100ms to 30Sec

#### TILT SWITCH

- Robust tilt switch in a 1 in (25.5 mm) 0.D. chromed mild steel tube
- Hermetically sealed to prevent moisture from entering the instrument
- Switches at 25° from vertical in any direction
- Provides simple high alarm for solid level control Can be connected to a PLC, or connected to the
- Tilt Master

