



# M1450 Series Linear Shut-Height Monitor for just \$1500, + Transducer



## Linear Transducer based Shut-Height Monitor

The M1450 series Shut-Height monitor uses linear ultrasonic rod as its position feedback device. Ultrasonic transducers are easier to mount on the shut-height mechanism, however the cost increases in proportion to maximum shut-height of the press

### Bright LED Display

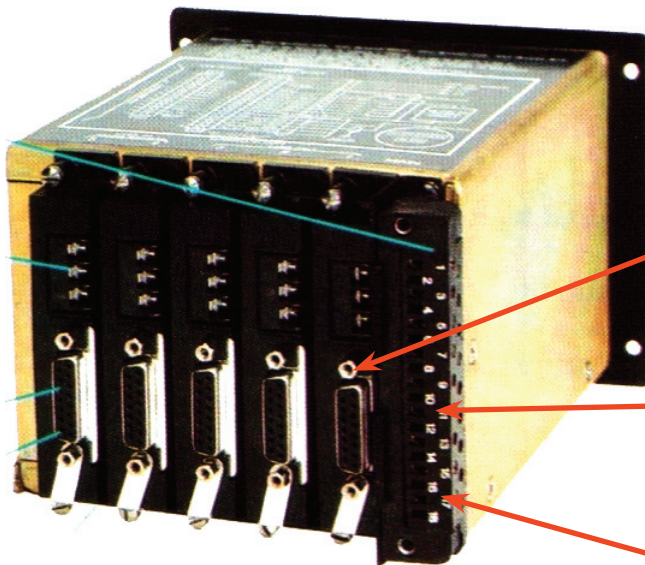
6 digit LED display indicates shut-height as well as 8 programmable PLS limits associated with the shut-height

### Splash-proof oil tight front plate

Tactile Keyboard designed for simple front panel Programming



Ultrasonic linear transducer from 12" - 108"



8 PLS Outputs expandable to 40

Main terminal block for power input 115/220VAC and transducer connection

Program Enable/Disable contacts to avoid unauthorized program changes

M1450  
Linear Shut-Height Indicator

# Simple to Program Linear Shut-Height Monitor

## Principle of Operation

The M1450 programmable shut-height monitor consists of two parts, one being a linear transducer mounted on the shut-height mechanism and the other, a programmable unit mounted in the Press control panel. The position signal is scaled and displayed on the front panel, which indicates shut-height in appropriate engineering units. There are 8 programmable limits that monitor shut-height value than provide alarm outputs..

## Linear Ultrasonic Transducer

The M1450 reads the linear travel with 0.001" resolution and up to 108" of travel. This unit utilizes an ultrasonic transducer to monitor the linear position of a shut-height mechanism by the movement of a 1.3" diameter magnet ring over a 3/8" diameter stainless steel rod. An ultrasonic wave travels along side the stainless steel tube and is reflected by the magnet. Time measurement of the ultrasonic wave determines the position of the magnet from the base of the transducer.

## Easy Calibration

The M1450 requires calibration at the time of installation. The calibration process tells the M1450 the characteristics of the linear rod being used. Calibration is extremely easy. All that is required is entering a number printed on the label of linear rod.

## Programmable Scale Factor

The base measurement from the transducer can be converted to any engineering unit by a programmable scale factor.

## Detailed Specifications

**Input Power:** 105-135VAC, 50/60Hz, 35W exclusive of load (220V AC or 240V AC option)

**Operating Temperature:** -10° F to 130° F (-23° C to 55° C)

**Offset/Preset:** Programmable "0" to full scale

**Number of Programmable Channels:** 8

### INPUT/OUTPUT

#### Inputs:

Position input Linear Transducer, Program Enable

## Drift Monitor

Shut-height drift is monitored against a programmed upper and lower limit and an appropriate output is generated if shut-height is outside the limit.

## Upper and Lower Travel Limits

A second PLS channel can be programmed to generate an alarm output if shut-height exceeds upper limit or is below the lower limit.

## External Program Enable/Disable

Limit comparison can be disabled by an external input

#### Outputs:

8 PLS outputs

#### Modules:

Cam modules: 8 outputs each. NPN sink transistor

#### Outputs: Electrical Characteristics:

##### NPN Sink Transistor Output:

*Energized:* Transistor ON; 1.1V drop@100mA

*De-energized:* Transistor OFF; 01mA leakage ©50VDC

# M1450 Linear Shut-Height Monitor

## Linear Shut-Height Monitor - M1452, 8 Outputs

Linear ShutHeight Monitor without Limit output module and Linear Transducer

**\$1500**



### M1450 Features

- ShutHeight Indicator 12" to 108" span
- 0.001" resolution
- 6-digit Bright RED LED Display
- Prescalable Read-out
- Programmable Drift/Over travel Monitor
- 8 Programmable Limit outputs for Under & Over travel, optional

Part Number	Description	Price
<b>SHT-M1450-LNR</b>	Standard Unit, Linear ShutHeight Monitor without Limit output module and Linear Transducer	<b>\$1500</b>

Note: For Part Numbers and Price of individual components, cables & accessories, Ultrasonic linear transducers, CAM modules, relay chasis and other product variations such as additional PLS outputs **CALL THE FACTORY**

**The M1450 Linear Shut-Height monitoring System is expandable to have 40 PLS outputs**

## M1450 unit with cut-out, side and front dimensions

