LINEAR ZERO & SPAN CALIBRATION EQUATIONS FOR GAS DETECTORS

ZERO

$Raw_{range} = (Range+B)/M$

$M_{zero} = Range/(Raw_{range}-Raw_{zero})$

$B_{zero} = M_{zero}*Raw_{zero}$

SPAN

$M_{span} = SpanGas/(Raw_{span}-B/M)$

$B_{span} = M_{span}*Raw_{span}-SpanGas$

Linear equation $GasReading = M * Raw - B$ (1)
M=present slope
B=present Y intercept
$Raw_{range} =$ Present Raw variable for detector range (default=32767)
$Raw_{zero} =$ Raw variable as read while zeroing the detector
$Raw_{span} =$ Raw variable as read while spanning the detector
Range = Detector range
SpanGas = Span Gas value from cylinder

Note(1): B is provided as a positive value to the detector program.

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