SLICEWare   TDAS Control SIF

PREPARE tab

Field	Field	Value	Req.	Description	Note
Serial Number	Sensor S/N	Text (xx characters)	Yes	This is the name of the sensor in the database	
Description	Channel Description	Text	Yes	Use this field to describe the location of the sensor, etc.,	
Manufacturer	(Not Surfaced)	Sensor Mfr.	No	Not required but can be applied to give the user a defined range of choices	
Model	(Not Surfaced)	Sensor Mfr.	No	Not required but can be applied to give the user a defined range of choices	
ISO	ISO Code	16 character	No	ISO code for channel definition (	
Desired Range (EU)	Desired Max Range	Numerical	Yes	To improve signal quality, use a value above the expected un-filtered maximum of the sensors for a given test. Choose a value at least 25% above the expected value or the channel may be clipped	Note 1
Units	Engineering Units	Free Text	No	The text label associated for the sensor to identify the units when processing, plotting, or exporting data	e.g.: G, Nm, Inch, PSI,
Sensitivity (mv/V/EU)	Sensitivity (mv/V/EngUnit)	Numerical	Yes	Taken directly or derived from the sensors calibration record	Note 1, Note 2
Bridge type	Sensor Type	Fixed Selections	Yes	This value sets the hardware based on the sensor type	Note 3
Excitation (V)	Excitation Voltage	Numerical (Drop down)	Yes	The voltage supplied to the sensor	Note 1
Initial EU	Initial Engineering Unit Value	Numerical	Yes	Offset the EU of the recorded data by this value	
Proportional	Proportional to Excitation	YES/NO or TRUE/FALSE	Yes	Determine by sensor type. Unamplified resistive sensors are likely TRUE. For every volt in there is a "proportional" change to the mV/V sensitivity	Note 1, 4
Invert	Invert Data	YES/NO or TRUE/FALSE	Yes	This does not affect the digitized data as collected or stored but, when viewed or exported, the data is inverted	

Notes

1 These settings determine how the sensor input will be scaled and how the hardware will set an appropriate sensor gain.

  The DAS channel voltage input range is optimized by selecting an amplifier gain based on the "expected ful scale output"

  When proportion=YES (excitiation*sensitivity*desired range=expected full scale output)

  When proportion=NO (sensitivity*desired range=expected full scale output)

2 Many manufacturers provide the sensitivity (e.g.) as mV/g for an accelerometer. Many manufacturers provide the sensitivity for several situations

  If the accelerometer is proportional to excitation then the mV/G must be divided by the excitation value used during the calibration.

Performance	ENGLISH	SI
Sensitivity (±50 %) (at 10 VDC excitation)	0.010 mV/g	0.001 mV/(m/s²)
Sensitivity	0.001 mV/V/g	0.0001 mV/V/(m/s²)

3 IEPE (Integrated Electronics, Piezo electric) - Full-Bridge (Typical Wheatstone Bridge piezo resistive sensor) - Half-Bridge (Provides a reference for incomplete Wheatstone bridge sensors)

4 All check boxes equal YES/TRUE when checked