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Page 1

# TruSense S200 S210 Configuration

un LTI TruSense S2XX Utility	×				
File Setup About					
BLACER TECHNOLOGY SN: DS001117					
Laser On Counte	r				
O.59M <sup>38</sup> Enable Visible Laser Pointer      Disconnect					
Stop Measurement Configure Sensor Ierminal	<u>E</u> xit				
DS-100, TruSense S200-1.14-68, OCT 29 2013, 9753355E					

\$DM,F,2.060,F,0,4-486,3358.97*2488 \$DM,F,2.062,F,0,4-476,3359.04*0185 #DM,F.2.062,F,0,4-476,3359.04*0185
<ul> <li>aum, r.2.062, r.0.4-463, 3353, 10°67A5</li> <li>\$DM, F.2.059, F. 0.4-483, 3353, 10°67A5</li> <li>\$DM, F.2.038, F. 0.4-463, 3359, 23°6540</li> <li>\$DM, F.2.033, F. 0.4-464, 3359, 23°6406</li> <li>\$DM, F.2.037, F. 0.4-478, 3359, 48°30 FB</li> <li>\$DM, F.2.037, F. 0.4-478, 3359, 48°30 FB</li> <li>\$DM, F.2.035, F. 0.4-478, 3359, 48°30 FB</li> <li>\$DM, F.1.904, F. 0.4-240, 3359, 61°C66E</li> <li>\$DM, F.1.904, F. 0.4-165, 3359, 63°A0E7</li> <li>\$DM, F.2.003, F. 0.4-478, 3359, 38°00ED</li> <li>\$DM, F.2.003, F. 0.4-453, 3359, 86°0018</li> <li>\$DM, F.2.003, F. 0.4-527, 3350, 93°96CF</li> <li>\$DM, F.1.989, F. 0.4-527, 3360, 18°1438A</li> <li>\$DM, F.1.989, F. 0.4-527, 3360, 18°1438A</li> <li>\$DM, F.1.985, F. 0.4-527, 3360, 18°438A</li> <li>\$DM, F.1.985, F. 0.4-527, 3360, 18°438A</li> <li>\$DM, F.1.987, F. 0.4-526, 3360, 30°D08F</li> <li>\$DM, F.1.987, F. 0.4-526, 3360, 30°D08F</li> <li>\$DM, F.1.988, F. 0.4-532, 3360, 43°FCF9</li> <li>\$DM, F.1.988, F. 0.4-532, 3360, 43°FCF9</li> <li>\$DM, F.1.988, F. 0.4-538, 3360, 56°DA11</li> </ul>
Send Command \$st Clear Dumo Parameters

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### **Graphical Users Interface**

- **Device**: Model
- **SN**: Device serial number
- Red "Laser On": Laser is firing
- **Counter**: Measurement count
- Enable Visible Laser Pointer: Alignment laser
- **Terminal**: Brings up Terminal Mode. User can type in commands and see response as well as scrolling data as the sensor is measuring.
- Enter "Configure Sensor" for setup menus.

### **Terminal Window**

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- User may enter commands in the lower window. The data scrolls in the main window.
- **Dump Parameters**: Scrolls the settings in the sensor for review.

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Page 2

Targets Data R	ate External F	Port 4 - 20 m/	۵Ì
			•
surement Mode { Standard (750m Extended Range Intelligent Long F	\$MM} or 2460.6 ft) e (1500m or 492 Range (2900m o	21.3 ft) or 9514.4 ft)	
-Rang 1 1 1 1 1 1 1 1 1 1	pe Units (\$MU) Meters Feet Yards et (\$UO)	Autostart {\$M	14}
From File	A	pply & Save To	o File
evice	Apply	& Exit	Exit
	Standard (750m Extended Range Intelligent Long F - Rang 1 1 10 10 10 10 10 10 10 10 10 1	Standard (750m or 2460.6 ft) Extended Range (1500m or 492 Intelligent Long Range (2900m Range Units (\$MU) Meters Freet Yards I.0 Offset (\$UO)	Standard (750m or 2460.6 ft) Extended Range (1500m or 4921.3 ft) Intelligent Long Range (2900m or 9514.4 ft) Range Units (\$MU) Meters Freet Yards 1.0 Offset (\$U0) Autostart (\$M From File Apply & Save To Apply & Save To

Targets [	Data Rate	Eutomal Bart 4: 20	
		External Port 4 · 20	mA
Target Sele First Stronge Last	ction (Displ (\$DM.2 est (\$DM, (\$DM,4	lay Mode) 2) 3) 4) Apply & Save	To File
Device		Apply & Exit	Exit
	Target Sele First Stronge Last From File Device	Target Selection (Disp First (\$DM, C Strongest (\$DM, C Last (\$DM, From File Device	Target Selection (Display Mode) First (\$DM.2) Strongest (\$DM.3) Last (\$DM.4) From File Apply & Save Device Apply & Exit

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#### **Measurements Tab**

- **Measurement Mode**: Selection based on the maximum range.
- **Range Units**: User may select measurement units.
- Offset: Adds or subtracts from overall measurement.
- **Autostart**: Enable Autostart for sensor to automatically begin measuring on power up.
- Load Device from File: Upload file settings from saved file to sensor.
- **Backup Device**: Save current sensor settings to file.
- **Restore Factory Defaults**: Load settings from the factory from non-volatile memory.
- Apply & Save to File: Load menu settings to sensor and save to file.
- Apply & Exit: Save menu settings to sensor and exit
- **Exit**: Simply exit.

### <u>Targets Tab</u>

- **Target Selection**: Target Discrimination Menu. User selects target based on application.
- Advanced target displays are available Serial Communication Protocol section

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Page 3

Configuration					
Measurements	Targets	Data Rate	External Port 4 - 20	) mA	
	Data F Numi 1 Delaj	tate ber Of Measu (0 = 0 y Between M	irements continuous) easurements		
Load Devic	ce From File	une	Apply & Savi	e To File	
Load Devic Backup	ce From File		Apply & Save	e To File Exit	

an s	200 configuration		x					
Cor	Configuration							
Mea	Measurements Targets Data Rate External Port 4 - 20 mA							
	External Port Configuration (\$TG) Disabled Trigger Input - Active High Trigger Input - Active Low Trip Output - Active Low SDI-12 Set Trip Distance (\$RD) 1.0 Trip Distance Minimum 100.0 Trip Distance Maximum							
	Load Device From File Apply & Save To File							
L	Backup Device	Apply & Exit	Exit					
	Restore Factory Defaults							

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#### Data Rate Tab

- User can select data update rate. In this example, the update rate is set to 1 Hz or 1 measurement per second.
- User would set both windows to "0" for maximum update rate of 14 Hz using these settings.
- Example #1: The user wants an update rate of 5 Hz. They would enter 1 for number of measurements and 0.2 (the inverse of 5) for delay between measurements.
- Example #2: The user wants 1 reading every 10 seconds. They would enter 1 for number of Measurements and 10 for delay between measurements.

### **External Port Tab**

- This menu appears when connected to an S210 and allows the user to select Trigger Modes and Trip Distance.
- **Trigger Input –Active Low** (\$TG,2) The unit will measure continuous if the \$GO command is set to 0 (\$GO,0). The sensor will not respond to the Stop command (\$ST). The user must then enter "\$TG,0" to stop the unit.

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Page 4

S200 configuration						
Configuration						
Measurements Targets Data Rate	External Port 4 - 20 m	4				
4-20mA current loop not supported by this device.						
Load Device From File	Apply & Save To	File				
Backup Device	Apply & Exit	Exit				
Restore Factory Defaults						

### **External Port Tab**

• This menu appears when connected to an S200 or S210 as these do not support 4-20.

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Page 5

#### S200 / S210 I/O Trigger Cable with Optional PC Connect (1 of 2)



TURCK CABLE CONNECTOR MALE VIEW (FROM CABLE)

Required for initial sensor configuration only.

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Page 6

### S200 / S210 I/O Trigger Ruggedized Enclosure Terminal Block with Optional PC Connect (2 of 2)



Required for initial sensor configuration only.

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Page 7

### S200 / S210 SDI-12 Ruggedized Enclosure Terminal Block with Optional PC Connect (1 of 2)



Required for initial sensor configuration only.

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Page 8

### S200 / S210 SDI-12 Cable with Optional PC Connect Wiring Diagram (2 of 2)



TURCK CABLE CONNECTOR MALE VIEW (FROM CABLE)

NOTE:

1

2

3

4

5

6

SENSOR CONNECTIONS

SDI 12

GND

RED TRACE INDICATES

FOR TRIGGER IN

BROWN

WHITE

BLUE

BLACK

GRAY

PINK

(SDI-12 LOOP)

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