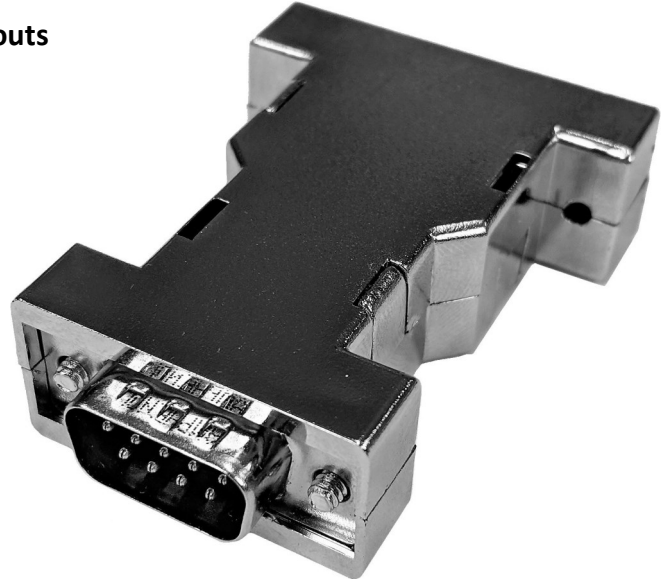


PRODUCT DATA SHEET

Signal Adapter (SA 1xxx)

The SA 1xxx series of adapters are designed to interface 11 μ App and 1Vpp incremental signals to TTL digital readout systems. Featuring a male D15 input and a male D9 output connector, the SA quickly installs in-line between the measuring device and the display. With eight available interpolation factors, the SA can provide high resolution TTL to the display even when using a low resolution measuring device such as a tape scale.

- **Ideally suited for adapting analog scales to TTL digital readouts**
- **11 μ App and 1Vpp versions available**
- **Ten interpolation factors to match desired scale resolution**
0.5x, 1x, 2x, 2.5x, 5x, 10x, 20x, 25x, 50x, 100x
- **TTL output channels will Tri-State upon signal failure**
- **Easy Plug-n-Play installation**
- **Low current draw**



Technical Specifications

PRODUCT	SA 107x	SA 187x
PRODUCT SPECIFICATIONS		
Input Signal	11 μ App	1Vpp
Output Signal	TTL	TTL
ELECTRICAL SPECIFICATIONS		
Maximum Input Frequency	55Khz for 0.5x, 1x & 2x	24Khz for 2.5x, 5x, 10x, 20x, 25x, 50x & 100x
Maximum Output Frequency	55Khz for 0.5x, 1x & 2x	83Khz for 2.5x, 5x, 10x, 20x, 25x, 50x & 100x
Useable Input Amplitude	2 μ A — 32 μ A	0.2V — 3.2V
TTL Tri-State	Yes (on overspeed or low input amplitude)	
TTL Minimum Edge Separation	4.0 μ s for 0.5x, 1x & 2x	3.0 μ s for 2.5x, 5x, 10x, 20x, 25x, 50x & 100x
Reference Pulse Width	90°	
PHYSICAL SPECIFICATIONS		
Dimensions (L x W x H)	2.46in [62.4mm] x 1.65in [42.0mm] x 0.64in [16.2mm]	
Weight	0.9oz	
IP Rating	IP 30	
POWER SPECIFICATIONS		
Supply Voltage	3.7v — 6.5v DC	
Maximum Current Consumption	120mA	115mA
CONNECTIONS		
Input	D15 Male	
Output	D9 Male	

SA 1xxx

INPUT SIGNAL TYPE

 11 μ App = 0
 1Vpp = 8

OUTPUT SIGNAL TYPE

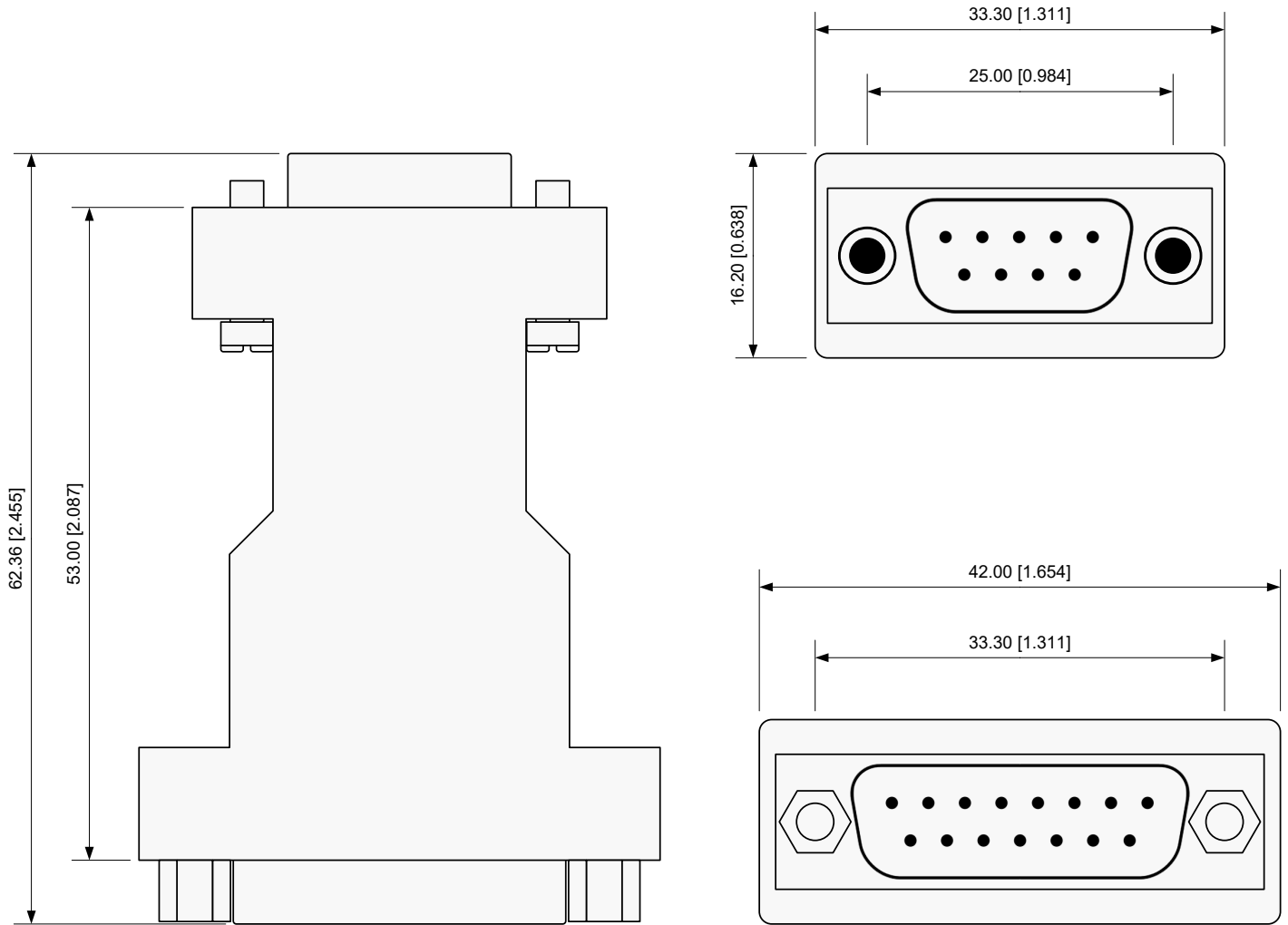
TTL = 7

INTERPOLATION FACTOR

 1x = 0
 2x = 1
 5x = 2
 10x = 3
 20x = 4
 25x = 5
 50x = 6
 100x = 7
 0.5x = 8
 2.5x = 9

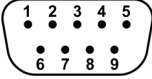
Dimensions

All dimensions are in mm [in].



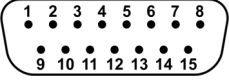
Electrical Connections

D9 MALE (TTL)



1	2	3	4	5	6	7	8	9
NC	A+	A-	B+	B-	0V	5V	R-	R+

D15 MALE (11 μ App / 1Vpp)



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
11μApp	5V	0V	A+	A-	Internal Shield	B+	B-	∞	NC	R+	NC	R-	∞	NC	∞
1Vpp	5V	0V	A+	A-	NC	B+	B-	∞	NC	R+	NC	R-	∞	NC	∞

∞ = Reserved / Do Not Use

NC = Not Connected

