



ASPHALT STRAIN TRANSDUCERS (AST/VAST) - MEASURE AXIAL STRAIN IN FLEXIBLE PAVEMENT UNDER HIGH FREQUENCY (DYNAMIC) CONDITIONS. THESE LOW MODULUS, RUGGEDIZED SENSORS ARE BUILT TO WITHSTAND THE HIGH TEMPERATURE AND VIBRATORY ROLLED COMPACTION REQUIRED FOR ASPHALT PLACEMENT.

UTILIZING FOUR ACTIVE ELEMENTS OF A WHEATSTONE BRIDGE CIRCUIT, THIS GAGE IS EASILY ADAPTABLE TO MOST DATA ACQUISITION SYSTEMS. EACH SENSOR IS INDIVIDUALLY CALIBRATED WITH HIGH TEMPERATURE RESISTANT LEAD WIRE ATTACHED AND IS PROVIDED WITH QC DOCUMENTATION AND CALIBRATION PLOTS.

SPECIFICATIONS

MODEL	AST350-8	AST350-6	VAST
GAGE LENGTH	8 in (203 mm)	6 in (152 mm)	1 in (25 mm) to 3 in (76 mm)
CIRCUIT	Full Wheatstone bridge with 4 active 350Ω strain gages		
EXCITATION VOLTAGE	+1.0 to +10.0 Vdc		
OUTPUT	mV level, ratiometric to Excitation Voltage		
SENSITIVITY @1,000 με	~ 1.3 mV _{out} /V _{exc}		
POWER RATING			
MAX	300 mW		
TYPICAL	72 mW @ +5.0 Vdc		
INTELLIDUCER ¹	13 mW @ +5.0 Vdc		
STRAIN RANGE	5,000 με		
CABLE	Custom lead cable length made to order: IC-02T-125 [24 AWG, 2 pair, drain wire, Teflon insulation and Jacket] IC-02-187 [22 AWG, 2 shielded pair, drain wire, red PVC jacket]		
TEMPERATURE RATING ³	-58° to +176 °F (-34° to +200 °C)		

¹ Intelliducer connector required with STS Intelliducer data acquisition nodes.

² Temperature limit based on instrumentation cable operating temperatures, call BDI for wide temperature range cable options.

OPTIONS & ACCESSORIES



Intelliducer Connector - Required for use with STS Intelliducer Nodes, cable is connected and potted for a weatherproof seal.



High Temp Instrumentation Cable - 2 shielded twisted pair (24 awg) with drain wire, 0.125" diameter, PTFE Jacket and wire coating.



Instrumentation Cable - 2 shielded twisted pair (22 awg) with drain wire, 0.187" diameter, red PVC jacket.