

# 5-in. Series BlackStream ASM Dynamics Tool

The BlackStream™ along-string measurement (ASM) tool is a collar-based, downhole drilling dynamics measurement tool with a compact design that lends itself to flexible placement along the drillstring. The tool is designed to connect to the IntelliServ™ networked drillstring, providing real-time data for 25 channels every 2 seconds.

### Specifications 5-in. Drillpipe

Tool	Specifications	Sensors	Specifications
OD	6.625 in.	Radial (lateral) acceleration (x2)	±50 g (0.002 g resolution)
ID	3.25 in.	Tangential acceleration (x2)	±50 g (0.002 g resolution)
Length	71 in. shoulder to shoulder	Axial acceleration (x1)	±35 g (0.0013 g resolution)
Pressure rating	25,000 psi	RPM (x1) (gyro)	+/-1200 RPM (0.05 RPM resolution)
Material	High-strength steel alloy	Pressure (internal/external)	0 to 25,000 psi (0.4% FS accuracy)
Connection type	GPDS50 pin and box	Temperature	-40 to 302°F (-40 to 150°C)
Rated temperature	302°F (150°C)		
Battery life	Up to 1,000 hr		
Reporting period	Every 2 seconds		

### Specifications 5½-in. and 5⅞-in. Drillpipe

Tools	Specifications	Data Acquisition	Specifications
OD	7 in.	Background sampling rate	256 Hz
ID	3.50 in.	Data acquisition / power enable	Cycled through the network
Length	71 in. shoulder to shoulder	Storage (buffer size)	256 bytes
Pressure rating	25,000 psi	Number of channels	25
Material	High-strength steel alloy	Reporting time	Every 2 seconds
Connection type	5½-in. Tool: TT550 pin and box 5⅞-in. Tool: XT57 pin and box	Statistics reported	Minimum/average/maximum values for radial acceleration, tangential acceleration, internal pressure, external pressure, rotation, mean and standard deviation on azimuthal radial acceleration, and tangential acceleration.
Rated temperature	302°F		
Battery life	Up to 1,000 hr		

Pressure sensors are located as follows	5-in. BlackStream ASM Tool	5½-in. and 5⅞-in. BlackStream ASM Tool
From the internal mid-sub box internal pressure-IP	38.54 in.	38.675 in.
From the internal mid-sub box annular pressure-AP	41.25 in.	41.375 in.

