

# 4-in. 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 4-in. Drillpipe

Tool	Specifications	Sensors	Specifications
OD	4.975 in.	Radial (lateral) acceleration (x2)	±50 g (0.002 g resolution)
ID	1.75 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	XT38 or TT390 pin and box	Temperature	-40° to 150°C
Rated temperature	150°C		
Battery life	Up to 750 hr		
Reporting period	Every 2 seconds		

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Data Acquisition	Specifications
Background sampling rate	256 Hz
Data acquisition / power enable	Cycled through the network
Storage (buffer size)	256 bytes
Number of channels	25
Reporting time	Every 2 seconds
Statistics reported	Minimum/average/maximum values for radial acceleration, tangential acceleration, internal pressure, external pressure, rotation, and the mean and standard deviation on azimuthal radial acceleration, and tangential acceleration.

Pressure sensors are located as follows	4-in. BlackStream ASM
From the internal mid-sub box internal pressure-IP	38.63 in.
From the internal mid-sub box annular pressure-AP	41.10 in.

