

# Well Intervention

## ParaComm Antenna and Stuffing Box

The ParaComm Antenna is used for the data communication to the Slick-E-Line® cable and transmits data to and from the downhole tools. The ParaComm Antenna incorporates a communication box and lubricator section specially designed for the Slick-E-Line® system.

The ParaComm antenna module is integrated with a standard lubricator section that is connected to a standard slickline stuffing box that also supports the top ParaSheave that measures depth, speed and tension.

The ParaComm antenna transmits both datasets of downhole tools and of the depth tension sensors of the ParaSheave and uses only on cable to the winch unit where the ParaComm data processing panel and ParaLog data acquisition systems are installed.

The data transmission between ParaLog DAS, Slick E-Line and downhole tools is done without any need for a slipring. The close-coupled antenna is oriented parallel to the Slick E-line for an optimum antenna signal.

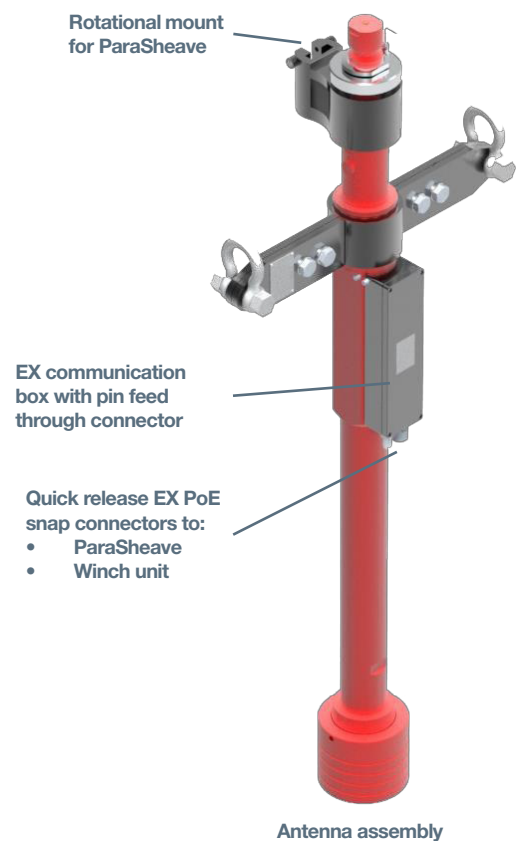
The ParaComm antenna has one electrical connection to communicate with the ParaComm data processing panel and another connection to communicate with the depth and tension sensors installed in the top ParaSheave.

### Features

- Electric powered RxTX Antenna module for communication with Slick-E-Line®
- Communication module to downhole tools
- 4 piece assembly: Stuffing box, lubricator, seal sub and collar, EX communication box
- Quick release EX PoE snap connectors on Ex communication box
- 45m data cable to data processing panel (in winch unit)

### Options

- Robust communication with downhole tools via Slick-E-Line®
- Bi-directional communication between DP panel and downhole tools
- Single cable from EX communication box to winch unit to transmit data from both downhole tools and depth / tension sensors
- There is no need for wiring and installation of a slipring



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Technical specifications		
Temperature rating	-20 /+60 °C	
Height (incl. SB, collar)	172.5 cm	5.7ft
Weight	120 kg	264.5 lbs
Wire diameter	0.092 to 0.160"	
Bottom connection	Collar assy. 5 3/4"-4, 10kPsi, OTIS. Option: other connection	
Electrical connection	EX PoE snap connectors, Ø 30 mm	
Cabling	1204142, 45 m, Ø 13.4 mm (0.52") to DP Panel	
Rating comm. box	IP65	
EX classification	CE EX II 2 G IIB T3 (zone 1)	
Standards	EN-IEC 60079-0, -7, -11, -17,-18 API 6A:20th -2010	
Service	Standard or H2S	

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## ParaComm Stuffing Box

The ParaComm stuffing box innovative design seals on the coated Slick-E-Line® against the well pressure. The patented sealing element is designed with a longer, large cross sectional area, which provides an environment friendly seal and cleaning action at well intervention operations.

The stuffing box is designed to pack-off all sizes of slickline, Slick-E-Line® and coated cables to a maximum of 0.160" diameter (using 20" ParaSheave). The bottom connection can be suited to standard PCE size of customer.

### Features

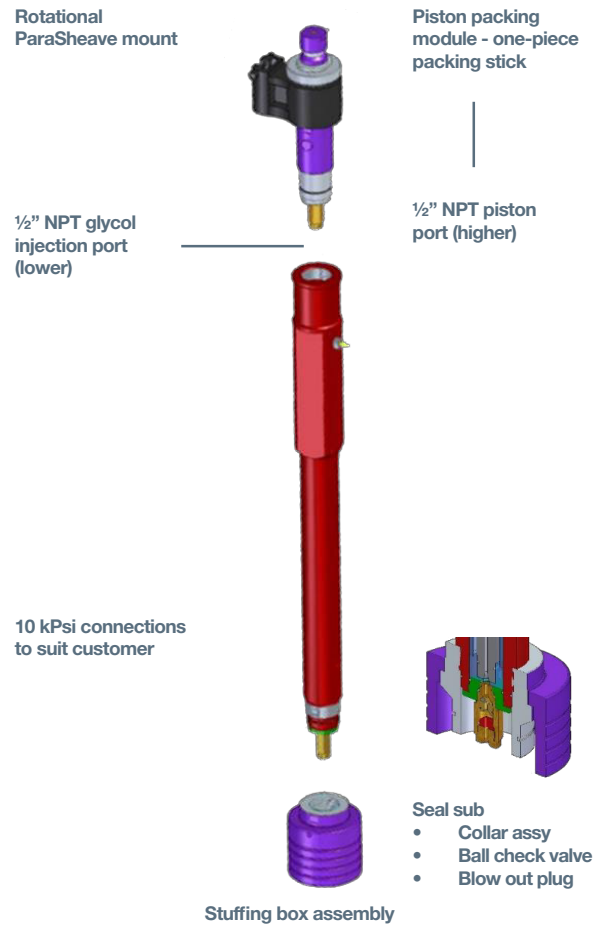
- One-piece packing stick with large cross sectional seal area
- Quick connect block for ParaSheave
- Lockable free-rotational ParaSheave mount
- Oil / grease injection piston port
- Glycol /chemical injection port
- Grease nipple for preventive maintenance to roller bearings of rotating sheave mount
- Integrated seal sub and collar assembly with ball safety check valve and blow out plug

### Piston module

- The one-piece packing stick is hydraulically pumped out with piston pressure when top cap is removed. The re-assembly is easy; just attach the packing stick at top of piston and bleed of hydraulic pressure at the piston.
- There is no need to disassemble the hydraulic piston during packing redress. This allows for longer seal life and the redress time is significantly reduced, while the redress can be done with the wire still in place.

### Seal sub

- The standard stuffing box seal sub is mounted at bottom collar of the ParaCom Antenna section. The Blow-Out Plug moves to sealing position if packing element fails and will seal on static wire.
- The sealing element is an integrated velocity ball check.



### Technical specifications

Working pressure	Up to 10,000 psi
Wire diameter	0.092 to 0.160"
Bottom connection	Collar assy. 5 3/4"-4, 10kPsi, OTIS. Option: other connection type/size
Standards	EN-IEC 60079-0, -7, -11, -17, -18 API 6A:20th -2010
Service	Standard or H2S

Note: For optimum safe operations, the bottom of ParaComm Antenna section can be connected to a tool catcher or tool trap to prevent any risk to loose of the tool string