

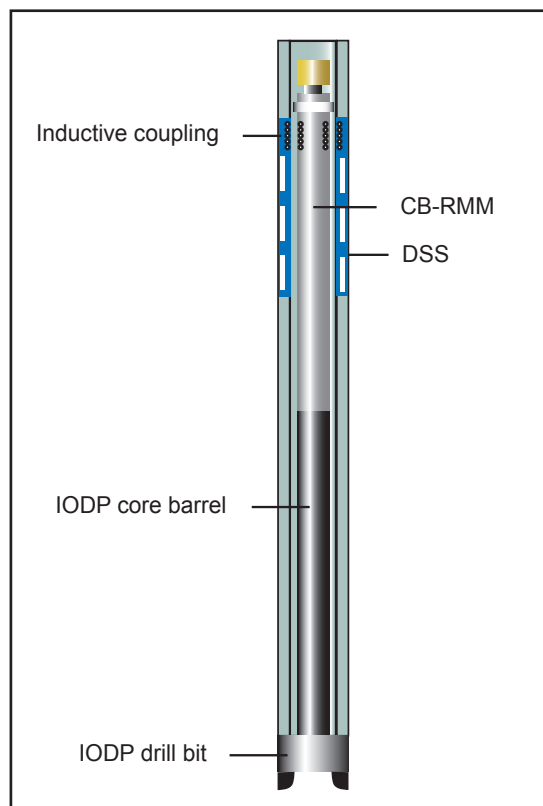
# Core Barrel - Retrievable Memory Module

## Description

The Core Barrel Retrievable Memory Module (CB-RMM) is a measurement and data recording tool that may be deployed routinely with all standard IODP core barrels. It has been designed to capture incoming weight-on-bit, torque-on bit, and pressure data from the Drilling Sensor Sub (DSS) via a wireless inductive link. The data are transmitted between two coils, one mounted in the DSS and one mounted on the RMM antenna. The DSS will transmit data continuously even when the RMM is not present. When the RMM is present, it recognizes the incoming data and stores them in the onboard memory. In addition to storing data from the DSS, the RMM makes its own pressure and acceleration measurements, which are stored with the DSS data.

## Applications

- ◆ Heave compensation evaluation
- ◆ Core barrel performance evaluation
- ◆ Sediment compaction
- ◆ Fluid pressure



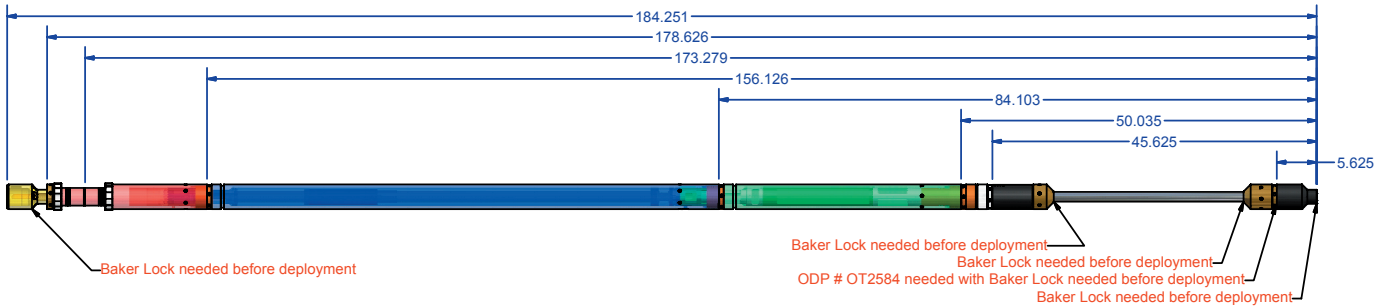
Schematic illustration showing the interdependent Drilling Sensor Sub (DSS) and Core Barrel Retrievable Memory Module (CB-RMM).



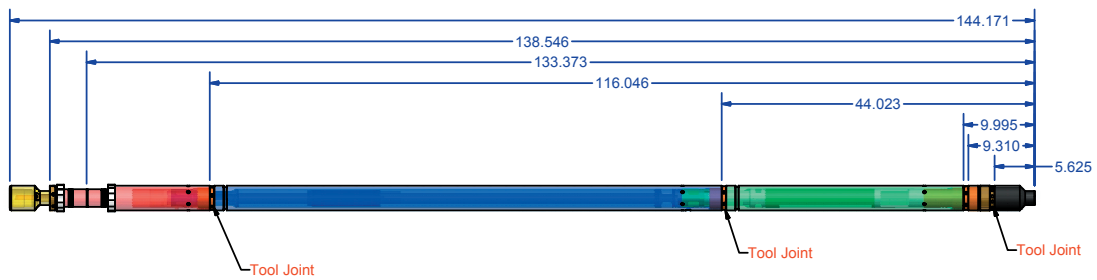
DSS/RMM alignment testing in a shore-based laboratory.

## Specifications

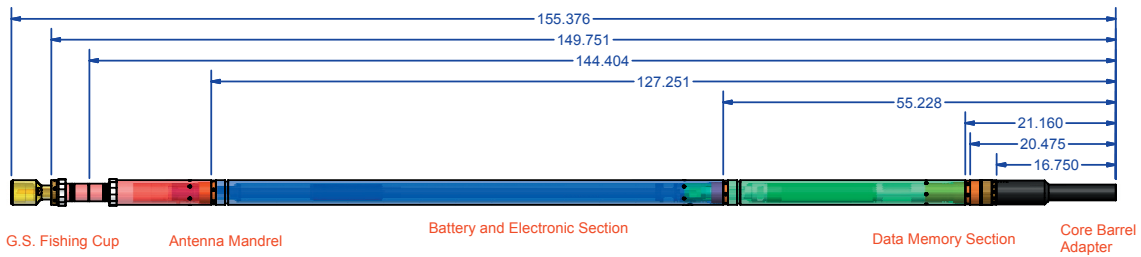
Length:	155.38 - 184.25 in.
Diameter:	3.625 in. (9.2 cm)
Weight:	250 lbs (113.6 kg)
Top connection:	IODP GS fishing cup
Bottom connection:	Interchangeable core barrel-specific adapters
Batteries:	24 C and 6 AA
Battery life:	16 hrs.
Memory:	64 MB compact flash or 8 MB flash
Acceleration measurement range:	
Option 1	+/- 4g
Option 2	+/- 25g
Acceleration sampling rate (x and z axis only):	50 Hz
Pressure measurement range:	0 - 10,000 psi
Pressure sampling rate:	1 Hz
Pressure sampling resolution:	1 psi



### APC MODE



### XCB MODE



### RCB MODE

Space-outs for DSS/RMM coil to core barrel:

- APC - 173.15"
- XCB - 133.16"
- RCB - 144.47"

(Measurements are from the top of the core barrel to the center of the DSS coil transmitter.)

Schematic illustrations of the DSS and RMM modules in various configurations. Measurements are given in inches.