

Grid Solutions

# PGCIL INDIA

**Reliable Traveling Wave  
Fault Location Solutions**

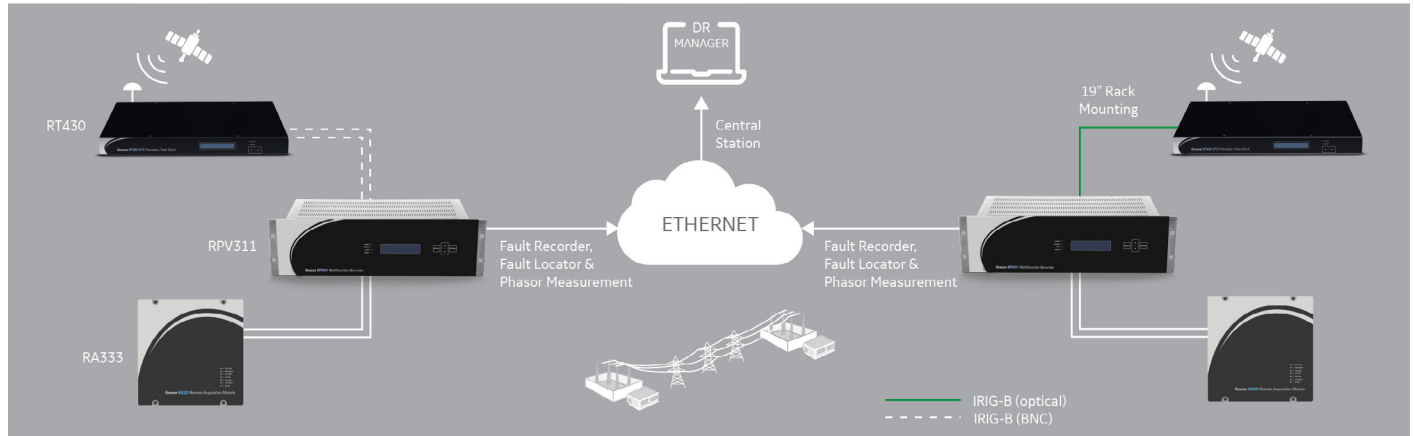


GE VERNOVA

## Reason RPV311 multifunction recorder is a time-domain solution for high accuracy Traveling Wave Fault Location (TWFL).

GE Vernova has successfully completed homologation testing of the Reason RPV311 Travelling Wave Fault Locator solution in India. The tests were conducted on a 260 km, 400 kV transmission line, in India's northern region. GE Vernova's Reason TWFL solution was assessed along side other solutions and the results showed the highest accuracy using GE Vernova's solution (accurate fault location within 18 meters).

GE Vernova was awarded India's first TWFL solution, and will be one of the largest implementations covering 53 substations and 83 400 and 765 kV transmission lines.



The solution is composed of the RPV311 processing unit, the RA333 high frequency acquisition unit and the RT43x GNSS clock. The RPV311 records the high frequency traveling wave, the data is then processed by the DR Manager software which automatically downloads the records, calculates the fault location and makes it available in MODBUS for SCADA communication.

**GE Vernova Reason provides high accuracy Traveling Wave Fault Location with more than 10 years of experience and proven results around the world.**

### CORE CAPABILITIES

- High Accuracy Fault Location ( $\pm 150\text{m}$  average error regardless of the line length)
- Automatic distance to fault and transmission via MODBUS

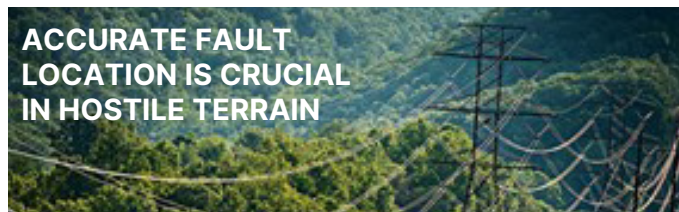
### FLEXIBLE APPLICATIONS

- High impedance fault location
- HVDC fault location
- Series compensation fault location
- Mixed lines fault location

### OPTIMIZED OUTCOMES

- Reduces outage time
- Saves money guiding accurate line patrols
- Helps maintaining quality indexes

## ACCURATE FAULT LOCATION IS CRUCIAL IN HOSTILE TERRAIN



## SCADA Substation A

LINE A	FAULT LOCATION	METHOD	DATE
LINE 1	132 km	TW	01/08 - 15:32:07
LINE 2	47 km	TW	19/04 - 04:42:05
LINE 3	92 km	TW	22/05 - 09:10:21
LINE 3	92 km	TW	22/05 - 09:18:32
LINE 4	231 km	TW	15/01 - 03:11:51

*Fault location transmitted to the supervisory system*

For more information, visit  
**[governova.com/grid-solutions](https://governova.com/grid-solutions)**

GE Vernova reserves the right to make changes in specifications and features shown herein, or discontinue the product described at any time without notice or obligation. Contact your GE Vernova representative for the most current information.

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