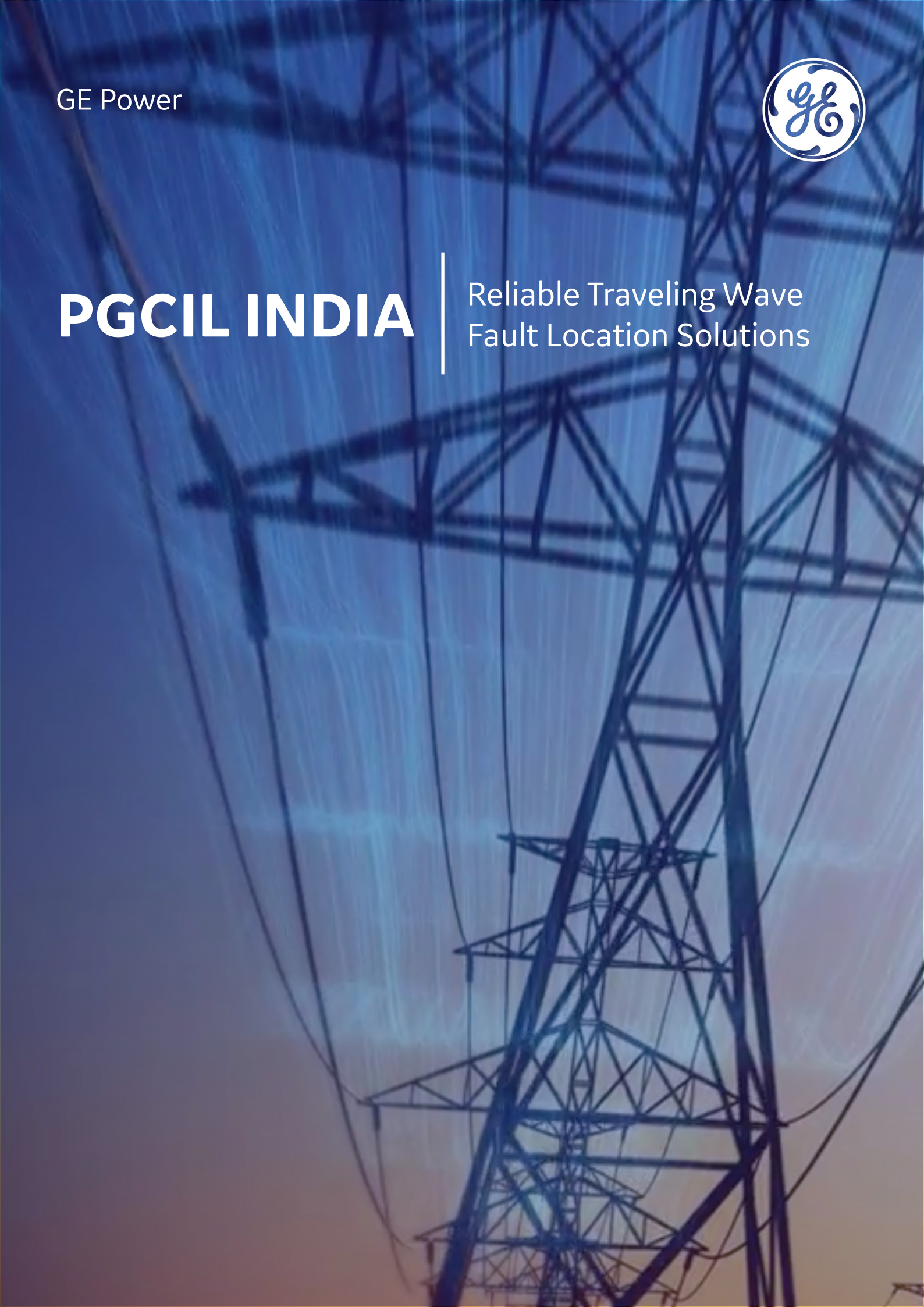
GE Power



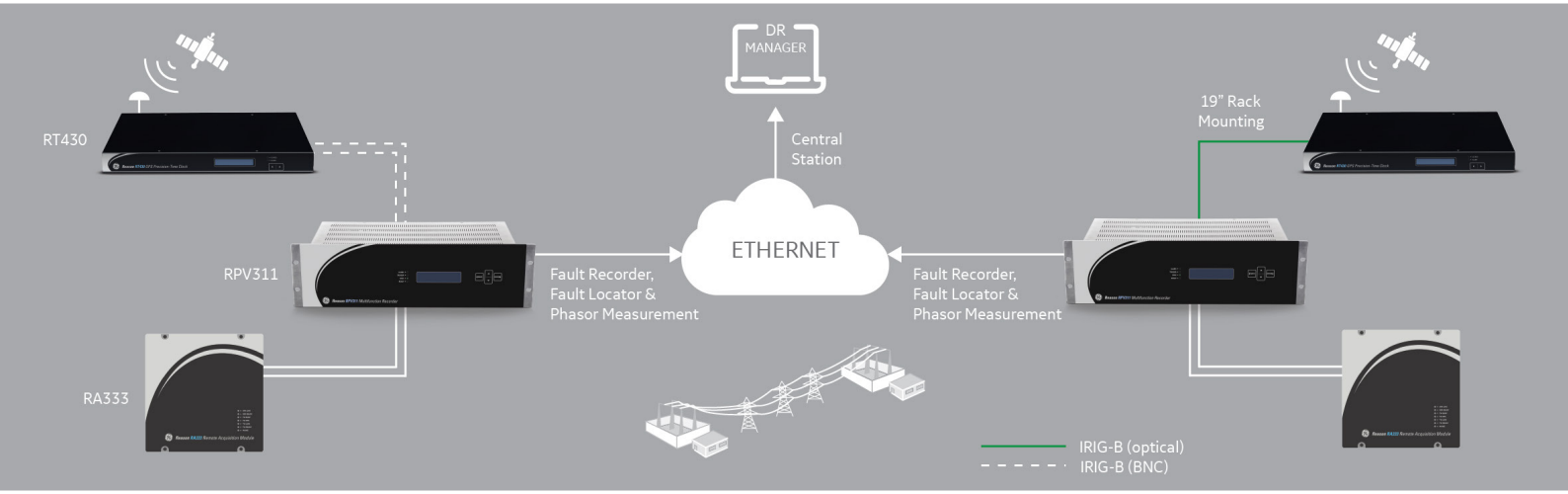
PGCIL INDIA

Reliable Traveling Wave Fault Location Solutions

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

GE 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's Reason TWFL solution was assessed along side other solutions and the results showed the highest accuracy using GE's solution (accurate fault location within 18 meters).

GE 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 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 (± 150m 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

SCADA SUBSTATION A

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

Fault location transmitted to the supervisory system

GEA-32061
English
18-05