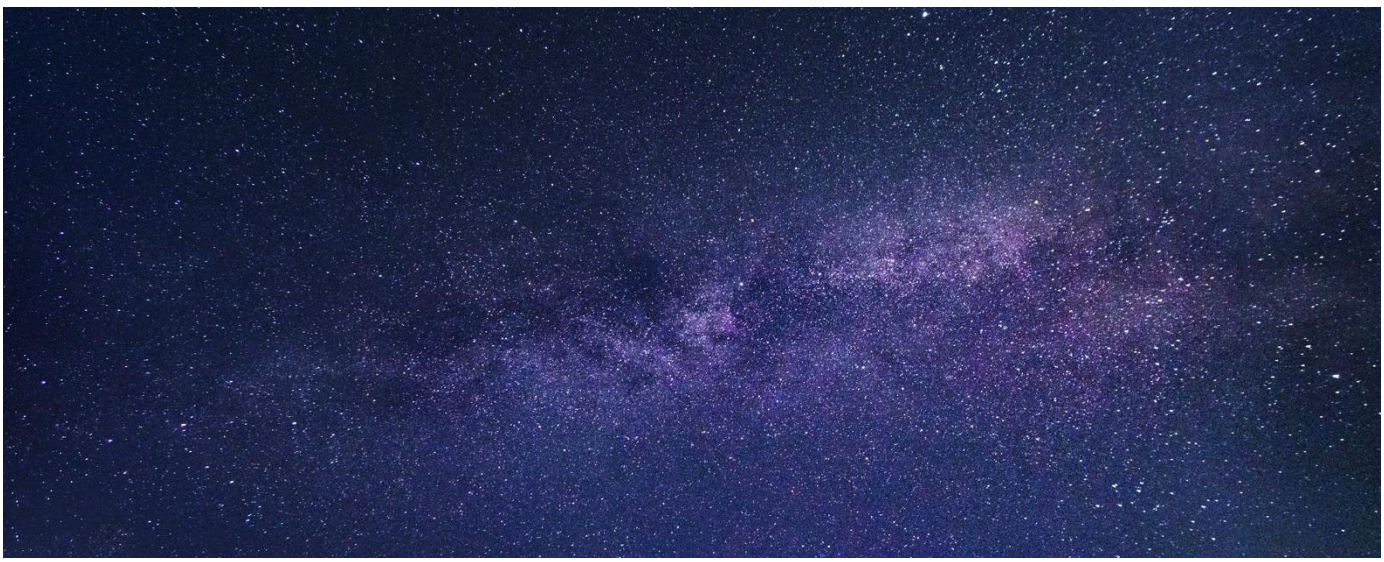
SEED

Smart Energy Efficiency Device

For Energy monitoring – LV, MV, HV

Datasheet

Version 1.1



Call: +44(0)20 8638 5757
email: info@orxagrid.com
www.orxagrid.com

Description

SEED - Smart Energy Efficiency Device measures electricity parameters of low voltage cables/busbars/ feeders as well as medium to high voltage incoming and outgoing feeders. SEED is a robust, flexible and rapidly deployed device that can convert connected feeders into continuously monitoring smart feeders. With Snap in Rogowski coil/CT SEED can be quickly integrated with feeders in substations, LV panels or at distribution transformers.

SEED monitors 3 phase electricity parameters. A variation of SEED, MULTI SEED is capable to measure up to 3 voltage channels with 6 current channels per phase, in all capable to monitor 18 current channels. Monitored data from SEED is sent to OrxaGrid's Analytics Platform wirelessly at user defined intervals. Powerful machine learning algorithms process data and display results on web and mobile dashboards that can help utilities to reduce feeder losses and improve efficiency.
Standard SEED supports only 4 current channels, MULTI SEED supports 18 current channels.

Key Benefits

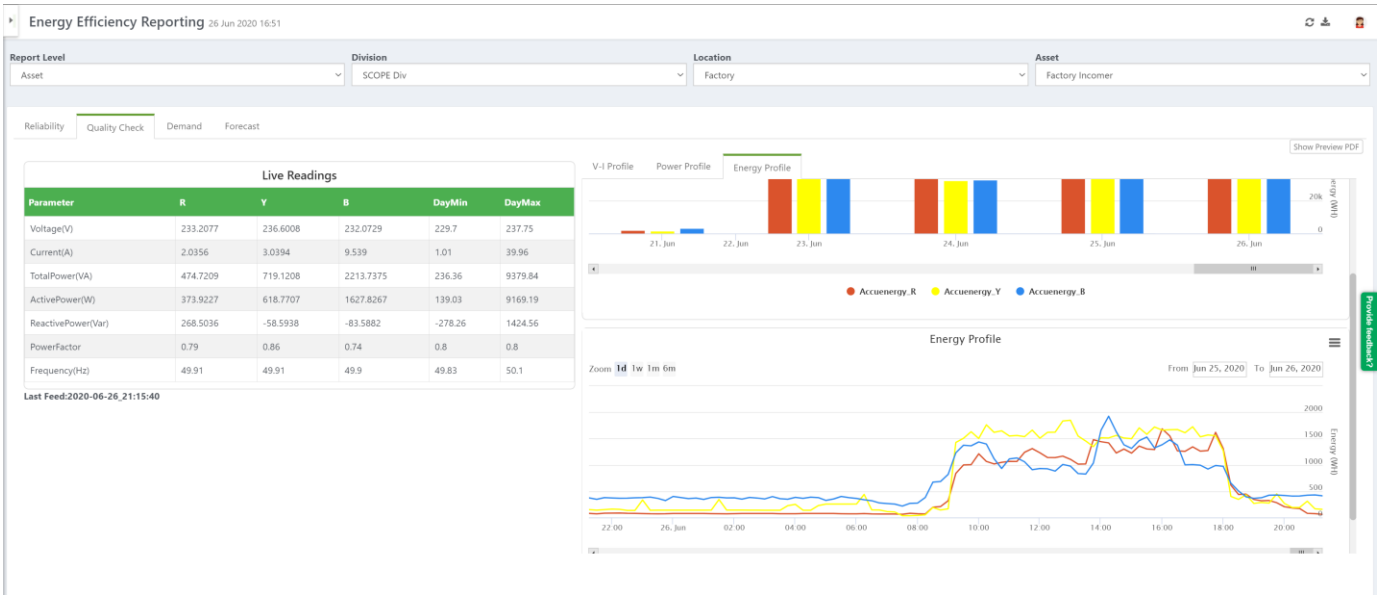
- Accurate monitoring and reporting of electricity parameters on web and mobile dashboard
- Historical profiles and comparisons of electricity parameters - current, voltage, power and energy
- Reliability profile - Number and duration of feeder interruptions per day
- Instant alarms and notifications to users on website or mobile
- Energy and Demand forecasting
- Comes with Magnetic base so quick & easy for installation

SYSTEM Composition

SR. NO	MONITOR ELECTRICAL PARAMETERS
1	Instantaneous RMS voltage [V]
2	Maximum RMS voltage [V]
3	Minimum RMS voltage [V]
4	Instantaneous RMS current [A]
5	Maximum RMS current [A]
6	Minimum RMS current [A]
7	Active Power [W]
8	Apparent Power [VA]
9	Reactive Power [Var]
10	Active energy [kWhr]
11	Apparent energy [kVAh]
12	Power Factor [PF]
13	Frequency [HZ]
14	Configurable digital channels

System Dashboard

OrxaGrid offers a proprietary web enabled application that allows users to easily track and display energy data and predictive alerts. Additionally, existing sensors or other software platforms could be integrated. Contact the OrxaGrid team for more information.



General Specifications

Parameters	SEED
Communication	3G/4G, WiFi, RS485
PT Connection	Three Phase 3 Wire or 4 Wire
Operating temperature	-20ºC to +70ºC
Humidity	95% Relative Humidity, Non-Condensing
Rated AC Voltage	240 VAC ± 10%
Rated AC Current	1000A, 100A, 10A, 1A (Operated with CT OR Rogowski Coil)
Power Consumption	5.0 Watts Maximum
System Frequency	50Hz/60Hz ± 5%
Accuracy (Energy)	Class 2.0S
IP Rating	IP 65 or IP 25 (selectable enclosure)
Enclosure material	Non - corrosive rugged polycarbonate casing
Size	255 X 180 X 125 mm (Length X Width X Height) (for IP 65 enclosure)