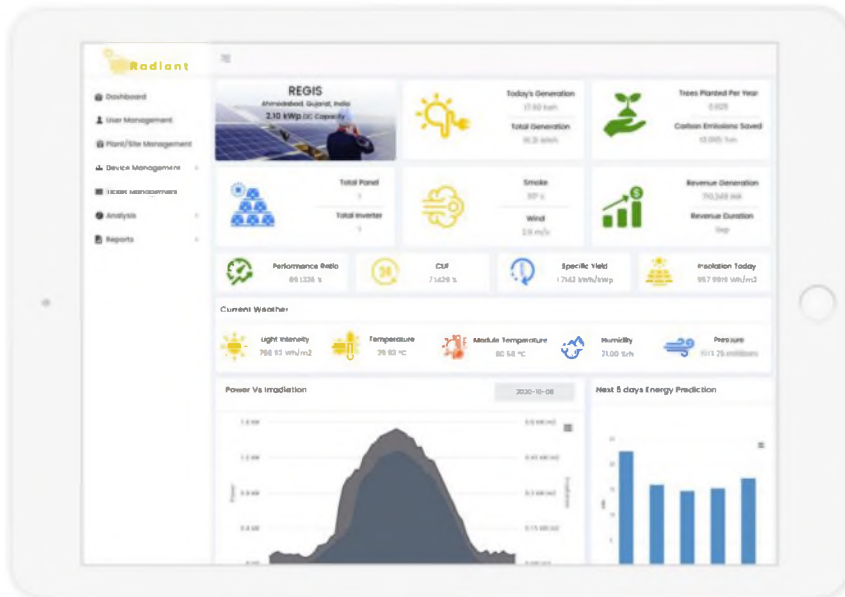


▶ **Radiant energy management system**

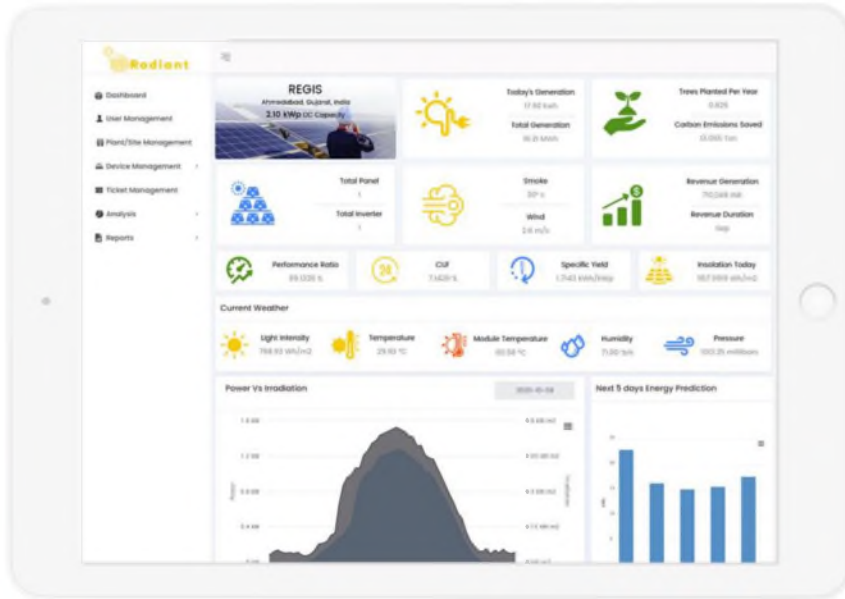
Radiant - Monitor Energy, anywhere, anytime



Radiant is a cloud based service for monitoring energy consumption, cost, operational efficiency and system status. It provides all the information an organization needs to manage its power system and reduce its energy costs. It enables the performance of the energy system to be optimized, through features including consumption monitoring, analysis of emissions and alerts issued using mobile technology.

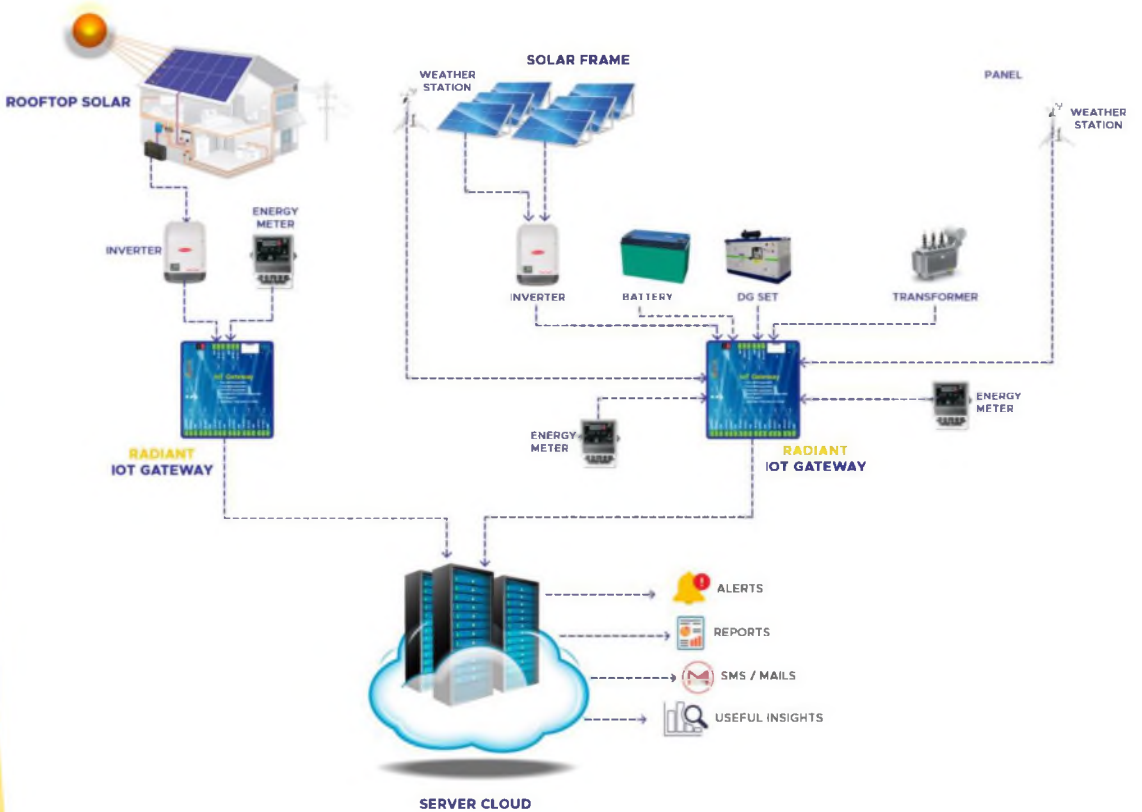
Radiant enables the exchange of data from different utilities, such as electricity, gas, heat and water. Live data from energy measuring points can be viewed in real time from any location with internet access.

Radiant - Monitor Energy, anywhere, anytime



The service model is flexible, so only the required number of meters and gateways need to be purchased, according to the number of monitoring points. Various service level options are available from the website, according to need, application and budget. Data sim or broadband connectivity is required for data communication at site.

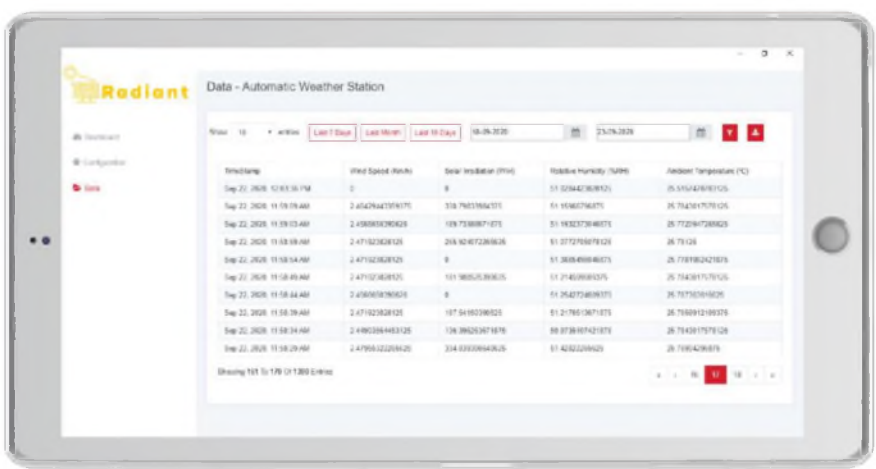
Architecture





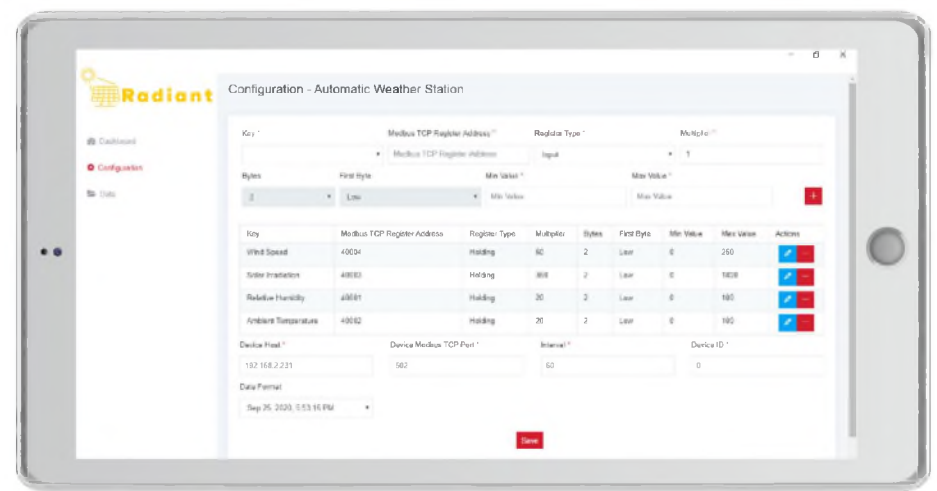
- Our radiant IoT gateway will collect data from energy meters, inverters which collect data from residential solar systems, weather stations and solar stations.
- The Radiant IoT gateway will in turn pass on the collected data from these sources onto the server cloud.
- This collected data will be segregated according to users and the users can get graphical and numerical information in form of SMS notification, reports, alerts, mails, notifications and useful insights

Weather Station Monitoring System

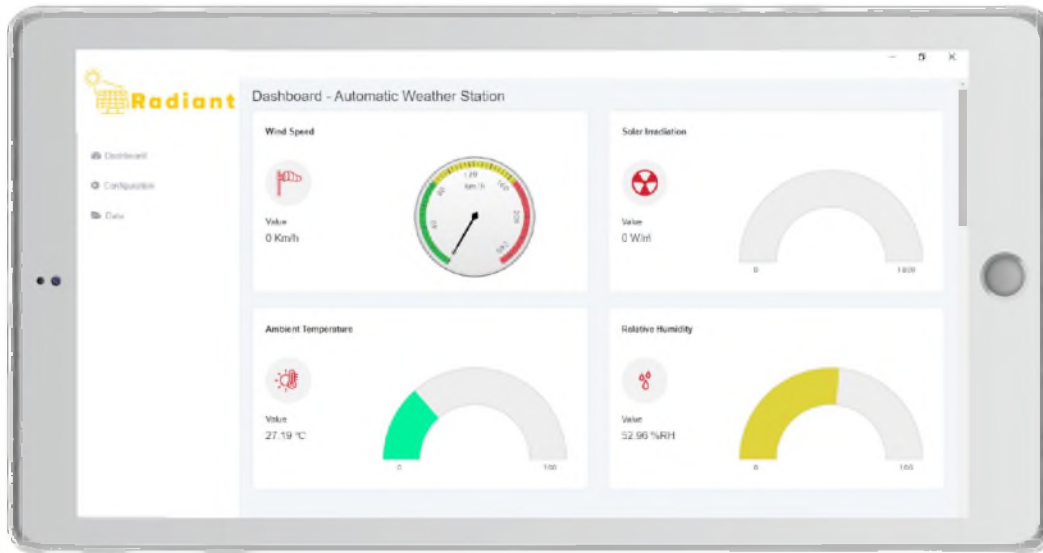


- Our weather station monitoring software gets connected to weather station using Modbus RTU or Modbus TCP.
- It continuously takes data from weather station and displays on dashboard

- The software works locally and does not need internet connection.
- The software is dynamically configurable at run time.



Weather Station Monitoring System



- It shows all historical data up-to 5 years.
- User can also download customized reports

Radiant Device Features



Multiple Connectivity Options

Sim/Lan/Wi-Fi Dataloggers



Remote Data Access

Monitor remotely on Radiant Solar



Customizable

Extensive sensor options & outputs



Standalone Sensors

Available in various outputs
0-5V, 4-20ma, RS485



Monitor Multiple Equipments

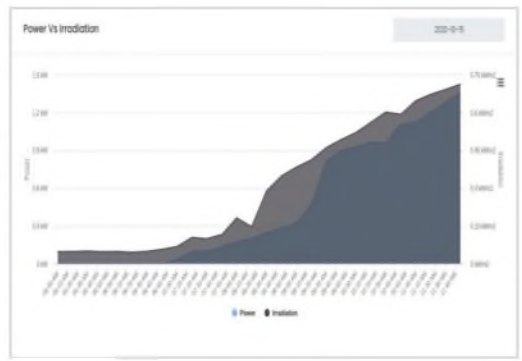
like Inverter, Meters & others along
with WMS

Benefits

Revenue Generation Details

Duration	Slab	Unit	Amount
Sep-Oct	0-50	50	15,000 INR
	51-100	49	15,680 INR
	101-unlimited	2110.1	696,333 INR
Total Revenue:			727,013 INR

Get information about revenue generation from your solar plant



Increase your solar generation by 30%

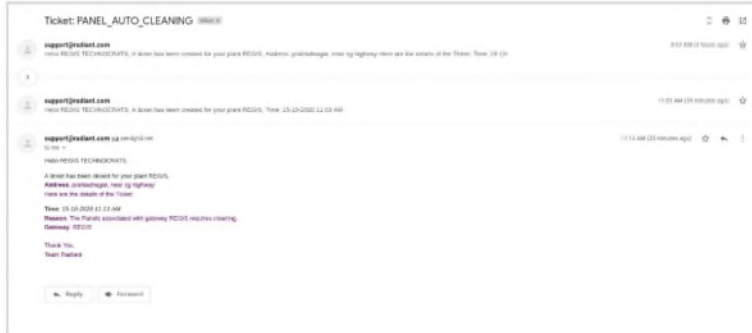


Radiant - Solar Monitoring System
 Ticket: The Panels associated with gateway REGIS requires cleaning.
 Time: 15-10-2020 11:03 AM
 Priority : Radiant

Reduce downtime by getting real time alerts

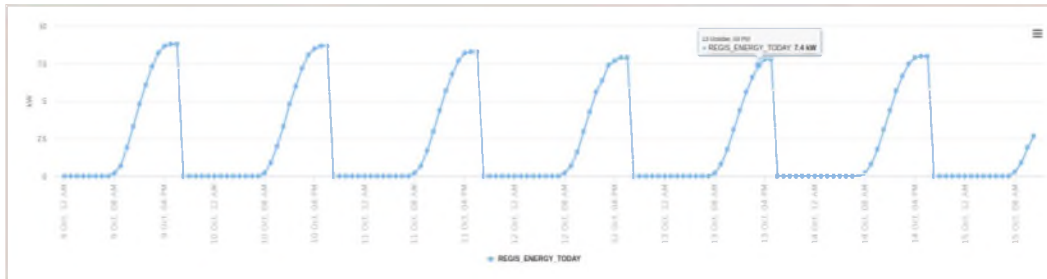


Benefits

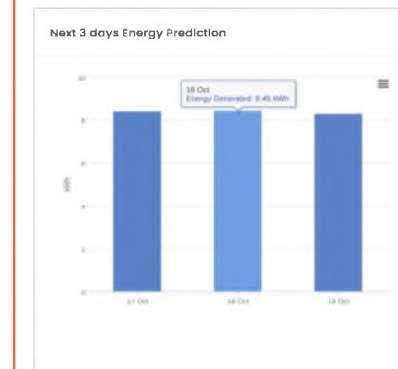


Radiant - Solar Monitoring System
Ticket: The Panels associated with gateway REGIS requires cleaning.
Time: 15-10-2020 11:03 AM
Priority : Radiant

Get alerts if your inverters and panels are working at 100% efficiency or not

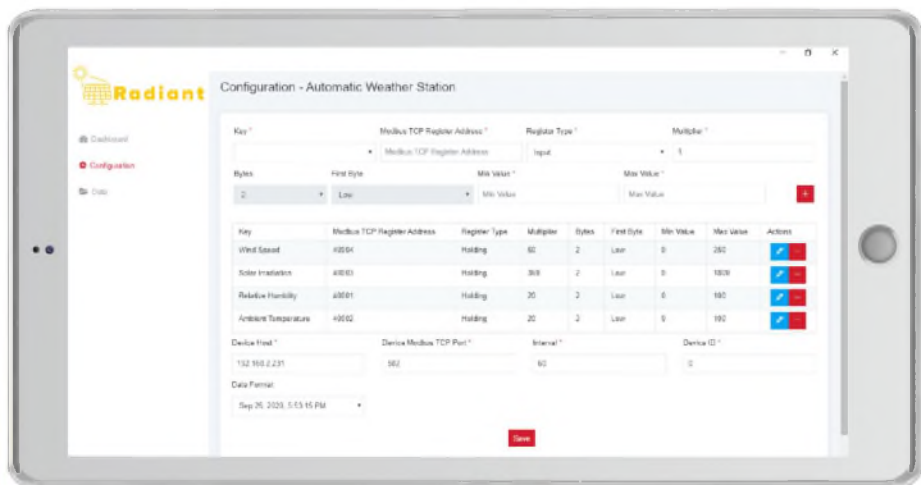


Get information about energy you supply to grid



Get your personal prediction about solar energy generation at your plant

Application



- Industry, micro, small and medium enterprises (MSMEs)
- Factories, offices, commercial buildings, hotels and institutions
- Industries and buildings purchasing power under open access
- Distributed generators and discrete loads
- Sub-tenant billing
- Multi-location retail chains

Feature

- Real-time personalized dashboards
- Shift wise energy monitoring and analysis
- Consumption reports for energy groups
- User configurable spreadsheet based reports
- Production data can be entered
- Historical graphs and trends
- 'Virtual meters' for in-depth analysis of a group

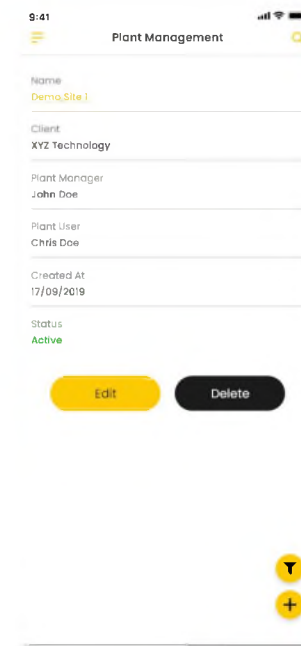
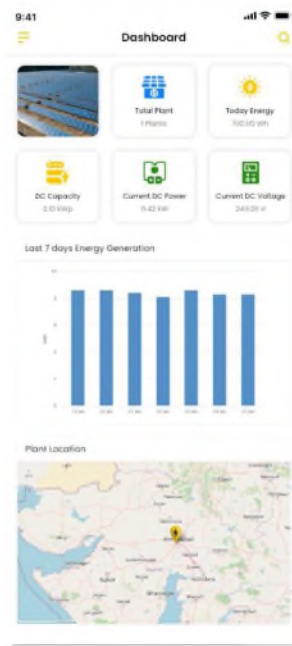
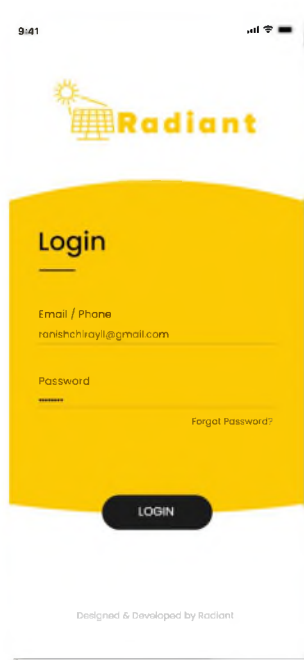
- Provision to integrate gas, heat and water
- Tariff module for cost calculations
- Target demand and open access schedule monitoring
- Alerts for deviations from targeted consumption
- Downloadable reports via e-mail or spreadsheet
- Choice of package to suit individual need

Benefits

- Helps create cost awareness for utility consumption (electricity, gas, heat and water)
- Isolate waste from efficiency
- Set realistic targets for energy consumption
- Verify the effectiveness of operational charges
- Learn where and when energy is consumed
- Carbon emissions through meaningful real-time displays
- Monitor the performance of geographically distributed assets as required, even while on the move
- Enables and encourages active participation by managers and staff
- Provides accurate information from any location with internet access
- Helps energy efficiency certification targets to be met
- Affordable licensing arrangements spread the cost and provide lifetime savings

Mobile Application

- It has a key feature of providing all the monitoring over mobile app, which is available for Android and iOS smartphones
- Users can download the app and run it with the same login created during service purchase
- User gets instant alerts/event notification over app
- User can configure new gateways and can view the data anywhere at anytime



Measure

- Electricity supplied by the grid
- Electricity supplied by diesel generators (DG)
- Electricity generated from renewable sources
- Electricity consumed: total, per load, or feeder-specific
- Power factor and demand

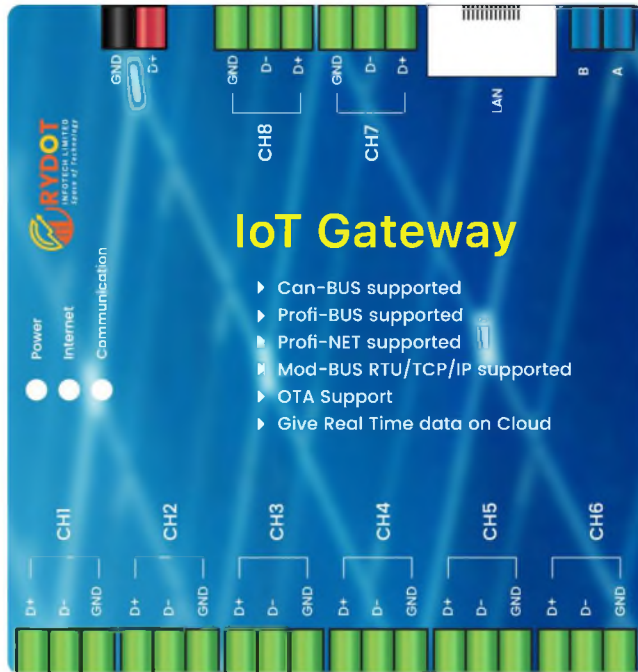
Monitor & Controlling

- Energy consumed against production
- Actual demand against contract demand
- Target demand against open access schedule
- Reactive energy against load
- CO2 emissions against energy consumption
- Consumption of different types of load or energy
- Locations with high consumption
- Building energy consumption with respect to temperature and humidity
- Consumption by department or location, using virtual groups
- Electricity, gas, heat and water consumption

On Demand Reports

- Consumption: daily, monthly, shift-wise daily and monthly, savings per interval
- Maximum demand: daily and interval-wise saving
- Parameter report: daily
- Min/max: daily
- Bill report: monthly
- Meter replacement: by day
- Non-electric consumption: daily, monthly and savings per interval
- Specific energy consumption: daily, monthly and daily per shift
- DG consumption on/off: daily, monthly and savings per interval
- Actual demand versus target: daily
- Carbon footprint: monthly

Device Specification



Category	Component	Details
System	CPU	ARM Cortex
Communication	WiFi, Ethernet	
Serial Ports	RS485	RS -485: A, B (D -, D+) (use for communication with inverter)
	Connector Type	Removable
	Connection Method	Screw and Push
Power	Operating Voltage	24 V, 5 Amp
Environmental	Operating Temperature	10 - 60 C
	Ambient Relative Humidity	5 - 95% RH, Non -Condensing
Sensors	Channels	8 - Channels
	Type	4 - 20 ma Protocol
	Connection	2 or 3 Pins

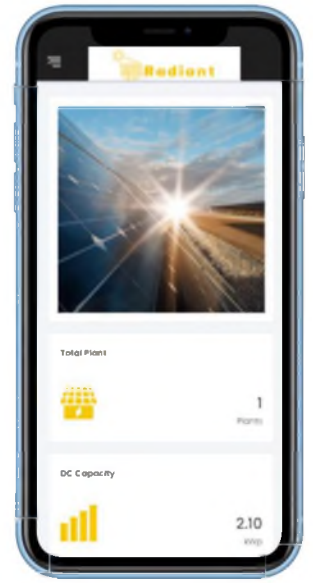
Platform Independent System



DESKTOP



TABLET



MOBILE

