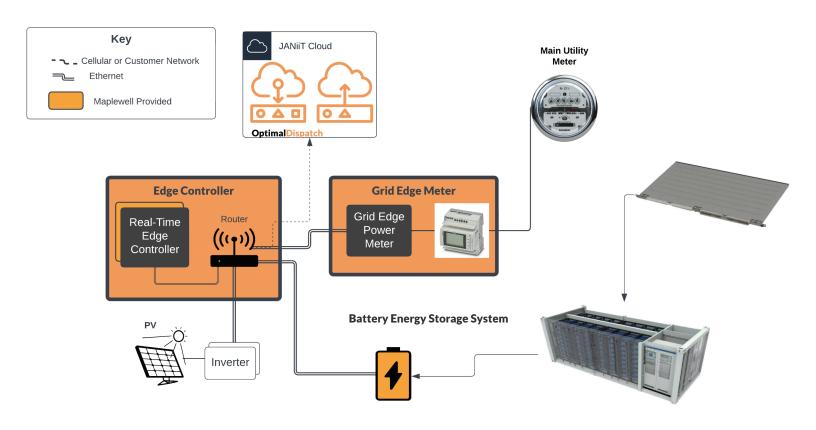
JANIT PRODUCT DATASHEET

What gets deployed?

JANiiT as a solution consists of 3 main components, JANiiT cloud, JANiiT edge, and a Battery Energy Storage System. Each of these components is stand-alone and will get installed as part of the turnkey solution.



Predictive control and forecasting algorithms run in the JANiiT Cloud, a predictive time series environment built on reliable AWS services. A customer network connection or cellular connection is required to connect to the environment. In the event of a network outage, JANiiT edge continues to run from latest state and customer services. **Components:**

- Cloud hosted database
- Customer dashboard
- Optimization / Forecasting

MAPLEWELL

ENERGY

JANIIT Edge

For low latency and reliability, JANiiT edge runs behind-the-meter services on local hardware and interfaces with the cloud to receive setpoint recommendations. JANiiT edge also interfaces with data producers on site to aggregate and push data to the cloud.

Components:

- Realtime controller
- Revenue grade power meter
- Managed control network



Technical Specifications		
System Specification		Notes
Battery Energy Storage Container		
Power Block Capacity	500 kW to 2.5 MW	Capacity ranges based on number or racks. Container fits seven (7) racks.
Cell Chemistry	Tier 1, LFP	
Cycle Life	> 5,000 times	
Thermal Management	Liquid Cooled	
Discharge Duration	1 - 4 hours	4 Hours typical for behind-the-meter cases
Weight	<60,000 lbs	Concrete pad foundation or screw anchors required
Container Dimensions (L x W x H)	24 ft x 6 ft x 10 ft	
JANiiT - Cloud		
Supported Services	Demand Response, Demand Shifting, 4CP/5CP Demand Management, Arbitrage	
Real Time Monitoring	State of charge, voltage, current, real & reactive power, system alerts	
Carbon Intensity	CO2 footprint on charging from grid	Generation mix at transmission node
Market Integration	Interface with aggregators and utilities	
Optimization	Online, 5 minute intervals, latency <500 ms	
Forecasting	Daily demand, daily PV production	
Benchmarking	Energy Star Portfolio Manager integration	
JANiiT - Edge		
Supported Services	Demand Charge Management, Time-of-Use, PV Self Consumption, Export Control, Backup Power	
Edge Controller	Industrial PC	
Edge Controller Software	Linux OS	Automatic over-the-air updates
Realtime Control Library	Deterministic, Load following, <40ms execution	
Metering	Revenue grade accuracy	
Networking	Cloud connection through customer network or optional cellular	
Protocol Support	MQTT, REST, Modbus, Canbus, Open-Al	DR, OPC UA

