

Energy
Management

Balanced
Edge and
Endpoint
Computing

Grid Feed-in
and
Demand-side
Management

Micro-service
SaaS

IOT-Ready

Email info@infinode.io
to enquire

All-in-one Solution of Distributed Energy Management for Embedded Energy Networks

iDLC3350 Dynamic Logic Controller

The iDLC3350 Dynamic Logic Controller integrates the functionalities of a power meter and a logic controller, allowing for the data collection of energy consumption from multiple loads and distributed energy resources.

Leveraging the customizable logic framework of the iDLC3350, users can easily define the priorities and control logics for both loads and distributed energy sources. This aids businesses and residential users in achieving objectives such as carbon reduction, maximizing the utilization of renewable energy, and implementing grid export limit.

**The iDLC3350 can further expand its functionality and connectivity via iMxx series expansion modules. Go to our website and download the leaflet of iDLC3350 for the list of expansion modules*



When Using iDLC3350 Makes Sense

- Customer (both commercial and residential) wants a better control of their loads and DER, a better control of when to turn-ON/OFF their loads to maximize the usage of clean energy and reduce their energy bill
- Embedded network where the aggregated solar PV is higher than 30kVA where the extra grid protection requirements apply
- Embedded network with both prosumers and consumers where export limit applies, and the embedded network manager needs a better and smart way of controlling the export of solar energy while also wants to maximise the solar PV generation

The operation philosophy of iDLC3350 is the dynamic management and control of:

Solar PV

Demand-side
response load

Smart load

Features and Benefits of Using iDLC3350

iDLC3350 alone:

- **Measurement and Calculation (single or three phase)**
 - High sampling rate measurement of power and energy data
 - Power demand calculation
 - Power quality measurement and calculation: harmonic, unbalance
 - Max, min and average calculation of power and power quality data
- **Alert and Alarm**
 - Frequency deviation, loss of phase
 - Phase sequence
 - Ct wiring under 3-phase configuration
- **User Interface**
 - LCD display
 - LED indicators
 - Pulse output of kWh
- **Data Storage**
- **Operation**
 - Realtime clock
 - Firmware upgrade via the *Polaris* PC software
- **M2M Interface**
 - RS485 interface (Modbus master)
 - Ethernet interface (Modbus TCP server)
 - Digital inputs
- **Security**
 - Password protection
 - Configurable Modbus TCP port
 - Sealed enclosure
- **Control Logic**
 - Control logic definition of loads and distributed energy resources (DER), such as PV inverters
 - Pre-defined third-party DER interface, configuration via the *Polaris* PC software

More Benefits if Used with FOURIER EMS and PV Ezy:

- **Remote and Wireless Grid Protection Mapping**
 - For multi-dwelling embedded networks with an aggregated solar PV higher than 30kVA where grid protection relay is required per the AS4777 standard
 - Seamlessly mapping of the relay output of grid protection relay to each PV point
 - Centralized monitoring of PV and grid protection relay mapping
- **Data Collection, Storage and Analysis**
 - Circuit level general power and energy data logging up to 5 years
 - Circuit level energy usage anomaly analysis
 - Potential third party analysis service expansion
- **Dynamic Demand and Export Control for Embedded Network**
 - Site level demand and export control by managing each iDLC3350 within the network
- **Cloud Interface and Data Visualization**
 - Cloud access to site level data and visualization for a better customer engagement
 - Pipeline for potential servicing business build-up