digital reach pvt ltd



Image shown is a representation on

DR POWER PLANT CONTROLLER

The Power Plant Controller (PPC), which is the control tool used to regulate the plant's power, is also in the plant's sub station. The PPC receives the setpoints and interacts with the inverters installed in the plant, to meet the requirements of the utility company, regulating the injection of energy into the grid. The local SCADA software can be used to monitor and control the PPC's setpoints, to ensure the proper operation of the installation.

PRODUCT OVERVIEW

Our Power Plant Controller functions as the central intelligence hub for electricity generation facilities, orchestrating essential operations to ensure peak performance and reliability. Engineered for operational efficiency, our controller excels in tasks such as load balancing, generation control, and fault detection. Prioritizing efficiency optimization and fuel management, it facilitates maximum power output.

Whether overseeing startup and shutdown procedures, managing grid interactions, or monitoring safety protocols, our controller ensures a seamless and secure power generation process. Step into the future of power plant management with our state-of-the-art solution, providing remote operation capabilities and robust data monitoring for well-informed decisionmaking.

The Power Plant Controller dynamically receives setpoints from the grid operator, utilizing various communication protocols such as Modbus TCP/RTU, DNP3, IEC 60870-5-101, IEC 60870-5-104, and OPC UA. Additionally, the controller supports the integration of digital and analog I/O modules, enhancing communication capabilities with third-party devices.

KEY FEATURES

Advanced Programmability: [Description of programming capabilities] Versatile Connectivity: [Details about input/output options] Real time Monitoring: [Highlight realtime monitoring features] Robust Construction: [Information about the build quality and durability] Intuitive Interface: [Description of the user interface]

DR POWER PLANT CONTROLLER SPECIFICATIONS

CONNECTIVITY

Communication Protocols:	TCP/IP, UDP/IP, Modbus/TCP, Modbus RTU, IEC62056-21,
[List of supported protocols]	IEC60870, DNP3.0, custom inverter protocols. Standardized or proprietary protocols upon request
Network Connectivity: [Ethernet, WiFi, etc.]	Ethernet

CPU & NETWORK INTERFACES

Operating System:	[If applicable]
CPU unit	1.86GHz operation frequency
RAM memory	4GByte
Storage	64GByte
Ethernet	2-ports 10/100/1000BaseT port 5-port 10/100 switch (optional) 6-port 10/100 switch with 2 optical SM or MM ports (optional)
USB	6-ports Rev. 2.0 compliant full speed host ports
Serial Ports	4- ports which offers 485 serial communication interface
Protocols	TCP/IP, UDP/IP, Modbus/TCP, Modbus RTU, IEC62056-21, IEC60870, DNP3.0, custom inverter protocols Standardized or proprietary protocols upon request

I/OS	
Number of digital inputs :	(DI) Up to 8
Number of Analog inputs :	(AI) Up to 4

POWER REQUIREMENTS

Power Supply	units 1 unit for power operation
UPS	DIN RAIL 24 V DC/10 A and 12 V DC/5 A
Supply voltage	24VDC or 100-240VAC
Supply frequency	50/60Hz
Supply current	Typical 0.8A@115VAC
Consumption	40W (typical)

GENERAL SPECIFICATIONS

Enclosure : IP66 GRP (Glass Reinforced Polyester) electrical panel		
Dimensions (HxWxD) : 850mm x 600mm x 300mm (33.5x23.622x11.8in)		
(Excluding cables and cable glands)		
Mounting : Wall mounted		
Weight : 20 Kg / 44 lbs		

DR POWER PLANT CONTROLLER SPECIFICATIONS

APPLICATIONS

Industrial Automation : [Describe applications in industrial settings

Process Control : [Highlight applications in process control]

Monitoring and Logging : [Emphasize its use for realtime monitoring and data logging]

Customizable Solutions : [Explain how it can be tailored to specific needs]

ENVIRONMENTAL

Operating temperature	0 to 60 C (32 to 140 F)
Relative humidity	10% to 95% non-condensing
Storage temperature	-40 to 85 C (-40 to 185F)
Marking	UL
Altitude	Operating available up to 3000m (9842 feet)
Pollution degree	2
Cooling Passive	Fanless
Usage	Indoors/Outdoors

SCHEMA



DR POWER PLANT CONTROLLER SPECIFICATIONS

LINE DIAGRAM FOR DR PPC



ABOUT US

Digital Reach enables the IoT devices to interconnect the embedded systems to the internet. The IoT devices are fully programmable as per customer requirements and it can be deployed in nearly all the areas like Manufacturing, Energy & Utility, Health Care, Home Automation, Retail etc. With our expertise in embedded hardware development, embedded software development, system integration, and project execution, we bring in our experience, commitment and team work to exceed our customer expectation in every customer engagement.

DIGITAL REACH PVT. LTD.

502, Venus Atlantis, Prahlad Nagar, Ahmedabad 380015, India Mobile : +91 9898062209 | Email : info@digireach.com | www.digireach.com

