ORION Touch

Controller

Description

ORION Touch is a sophisticated power system controller, that, due to the modular concept, fits into wide range of system sizes. It consists of a hot-pluggable unit, which provides basic I/O periphery and optional I/O modules that are connected to the very robust and reliable CAN standard-based communication bus (IMBUS). Due to its versatile connectivity and configurability, ORION can connect to the various devices at the site and provide the processed data and alarms remotely via standard protocols, SNMP, Modbus and MQTT, with customized content.

Applications

- A wide range of power supply solutions

Main features

- Fully backwards compatible with previous ORION versions – can be used for upgrading the functionality of old systems in the field
- Easy to read colour display with touch functionality for intuitive and convenient local operation
- Integrated WEB server provides an easy to use user interface with standard web browsers
- Remote monitoring via Gigabit Ethernet, modem or RS485
- Configurable security features to meet the various requirements
- Easy integration of 3rd party modules via RS485 or Ethernet using Modbus, SNMP or a proprietary protocol
- Integration of Eltek power modules via second CAN interface using eNexus protocol
- Easy maintenance by pluggable HW and modular SW architecture with loadable configurations, battery profiles, communication protocols, device drivers etc.
- Micro SD card slot to enable automatic backup
- Integrated PLC (Programmable Logic Controller) functions to enhance flexibility, and monitoring and controlling site infrastructure
- Advanced battery management and testing methods
- Intelligent energy saving features to prioritize the renewable energy sources, to optimize the rectifier system efficiency and to minimize the fuel consumption of diesel generators
- Advanced data logging with user defined data and sampling definition.

ORION Touch

Controller

DC INPUT	
Voltage range	18-60 V
Max. Current	0.8 Adc
Protection	Internal fuse 2A

FEATURE	
Support for rectifiers and other power converters	Up to 128 Delta or Eltek rectifiers, 128 Delta or Eltek PV converters, 64 Delta or Eltek DC/DC converters, 64 Eltek Rectiverters, 64 Boost converters
Number of battery, load and source strings	Up to 40 individually measured lead acid or NiCad battery strings, 200 individually measured load strings, and 16 DC source strings
I/O's (expandable with I/O modules)	1 Gigabit Ethernet port 2 RS485 ports 1 RS232 port 1 USB host 6 potential free change over contacts 2 inputs for temperature sensors 4 analogue/digital inputs 4 middle point/block measurement / generic inputs
Remote monitoring and control	Web browser, SNMP, Modbus, MQTT, HTTP-API, Syslog and customer specific protocols via gigabit Ethernet , RS232, RS485 or modem
Remote alarming	Dry contact, SNMP traps, Modbus, MQTT

General	
Dimensions (HxWxD)	83.4 x 40.0 x 205.1 mm (3.28 x 1.57 x 8.07 in)
Weight	0.5 kg (1.10 lbs)
Safety	IEC/EN/UL 62368-1 CAN/CSA C22.2 No. 62368-1
EMC	EN 55022, class B
Operating temperature	-40 to +70 °C (-40 to +158 °F)
Relative humidity	95%, non-condensing (Max.)

ORDERING INFORMATION	
ORION ID:E1	TPS1020028A

FUNCTION	
System	Site expansions using additional CAN based I/O modules
	PLC functionality for customization and supervision and control of auxiliary devices
	AC measurement, mains failure/phase failure detection and alarming
	Advanced generator control functions for fuel savings
	Configurable event and data log / statistics
	Remote and local SW and configuration update
Battery	Temperature compensated float charge, boost and equalize charge with charging current limitation
	Low voltage disconnection
	State of charge supervision and display
	Backup time supervision / Life time prediction
	Automatic battery test
	Symmetry supervision for cell/block voltages and string currents
	Lithium battery and combinations of Lithium and Lead Acid batteries
Rectifier	Individual rectifier information and control
	Sequential start-up / system soft start
	Efficiency mode with advanced rectifier cycling
	Redundancy and power capacity supervision

USER INTERFACE	
Local user interface	Colour touch display
WEB server	Web UI with configurable access rights, login control and user profiles
Configurability	Meter Panel to show measurements and events User-configurable application specific page for settings and status information
UIM Touch (optional)	Additional user interface module with colour touch display
Languages	English as default, other languages as loadable files

Delta Electronics (Switzerland) AG,
Freiburgstrasse 251
3018 Bern-Bümpliz, Switzerland
www.delta-emea.com
fact_sheet_ORION_IDE1_en_rev3-2 (TPS1020028A) / MHe