The Experts in RF Signal Handling

Sheer Power!

Product:

DEV 5071 - Power Supply 48 V DC, 1…4 * 1800 W

Features:

- Powerful DC Supply in a small 19”, 1 RU (45 mm) Housing
- Populated with 1…4 hot-pluggable 48 V 1800 W Power Supply Modules
- Galvanic Isolation of the Output Terminals, providing selectable Polarity of the Output Voltage
- Configuration, Surveillance and Control via comfortable Web Interface
- SNMP Remote Control Protocol Support

Application Areas:

- Satellite Ground Stations
- Cable Head End Stations
- Voice over IP
- CMTS Supply

Front DEV 5071 (equipped with 3 power supply modules)

Rear DEV 5071

The Situation

For high power applications the market provides a number of suitable power supplies with 48 V DC output.
But in professional applications there is the additional requirement for redundancy and easy monitoring capabilities.
Modularity and hot-swap ability are additional necessities.
All this should be combined in the smallest possible housing for professional 19” rack equipment.

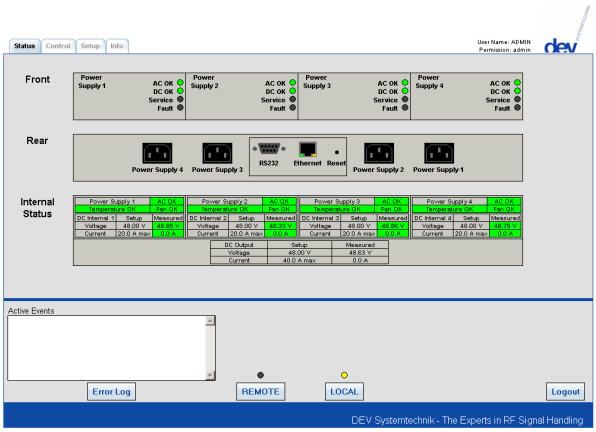
DEV worked out a Solution

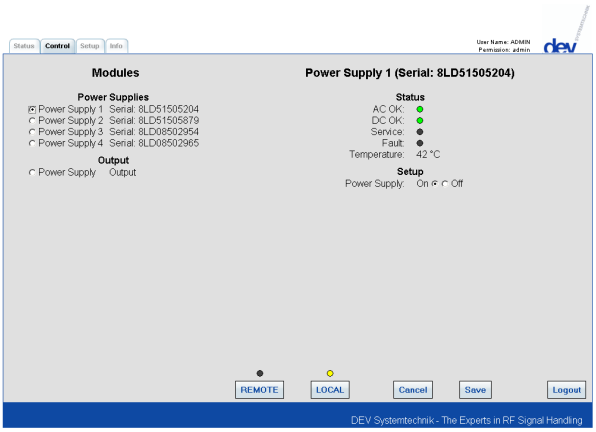
The DEV 5071 chassis was developed for professional use and is delivered with one to four power supply modules installed. If the power requirements are less than the maximum output power of 7200 W, i.e. not all four power supply modules are necessary, the instrument should be equipped with an additional power supply module, to realise a reliable, redundant and powerful source for DC loads working on 48 V DC.
There are implemented convenient options for the surveillance and the control of the instrument.

The Technical Concept

The DEV 5071 is delivered in a compact 1 RU chassis, providing slots for one to four power supply modules. Each of the power supply modules is capable to deliver 48 V DC, 1800 W. Therefore, the instrument provides up to 7200 W at the two sets of robust DC output terminals.
The DC output voltage is galvanically isolated, thus, the polarity can be swapped, i.e. the output voltage is either +48 V DC or -48 V DC.
For surveillance and control purposes a comfortable Web Interface is available, as well as monitoring and control of the instrument via SNMP.
In addition to the Ethernet interface which is used for the communication via Web Interface and via SNMP, the DEV 5071 provides a serial interface which can be used to configure the IP parameters of the instrument.

The DEV 5071 Web Interface





The Status Tab

The upper part of the Status Tab provides a symbolic view of the instrument from its front side and its rear side which is done to represent the physical indicators on the instrument.
In the middle, the current internal status is shown for the installed power supply modules.
If a value exceeds well defined limits, the corresponding value field will turn from green to red.
In the lower part of the Status Tab new errors and pending errors are shown in a small Active Events Window. To obtain more details on all errors, the Error Log button has to be operated. This will open a comprehensive window with additional information on the error(s).
The Remote button and the Local button are installed to define whether the control of the instrument is performed via a remote M&C system using SNMP protocol or locally via the Web Interface. The current operation mode is indicated via the corresponding yellow indicator.

The Control Tab

The Control Tab of the Web Interface provides means to access the functionality of each power supply module. Each module can be turned on and off and the indicators of the module plus the measured module temperature can be observed remotely.
The output voltage of the instrument can be adjusted in a different window of the Control Tab and a current limit for the complete instrument can be defined there as well, to observe excess current situations.
All changes within the Control Tab are applied, if the Save button is operated, to discard any changes possibly made, the Cancel button is to be actuated.
The functionality of the Remote button and the Local button in the lower third of the Control Tab is the same as in the Status Tab.
A Web Interface session is finished by operating the Logout button located at the lower right.

Technical Data

DEV 5071 Redundant Power Supply	
Remote Communication	
Interfaces, connectors	Ethernet, RJ-45 serial interface RS 232, Sub-D-9 (f)
Remote control & surveillance, interface	-via Web Interface, Ethernet; -via SNMP protocol, Ethernet.
IP configuration, interface	-via Web Interface, Ethernet; -via terminal (command line application), serial interface.
Redundant Power Supply	
Number of power supply module slots	4 (equipped with 1 module (with 2 * Option 23), 2 modules (with Option 23), 3 modules (default), or 4 modules (with Option 21)
Primary voltage	100…240 V AC supplied by 1…4 different lines
Output voltage	+48 V DC or -48 V DC selectable (by reversing the connection to the output terminals)
Maximum output power	1200 W per module, @ input 100…120 V AC nominal; 1800 W per module, @ input 200…240 V AC nominal; i.e. 7200 W total max. if equipped with 4 power supply modules
Power consumption	<7800 VA if equipped with 4 power supply modules
General Specifications	
Housing	19“ (483 mm), 1 RU (45 mm), 475 mm depth
Weight	~15 kg if equipped with 4 power supply modules
Environmental conditions	ETS 300019 Part 1-3 Class 3.1

Order Information

DEV 5071	Power Supply 48 V DC equipped with 3 power supply modules
Option 21	four power supply modules installed
Option 23	one power supply modules less installed (this option can be ordered up to two times)

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