W-IE–NE-R

TCP-IP Protocol for WIENER power supplies

User's Manual

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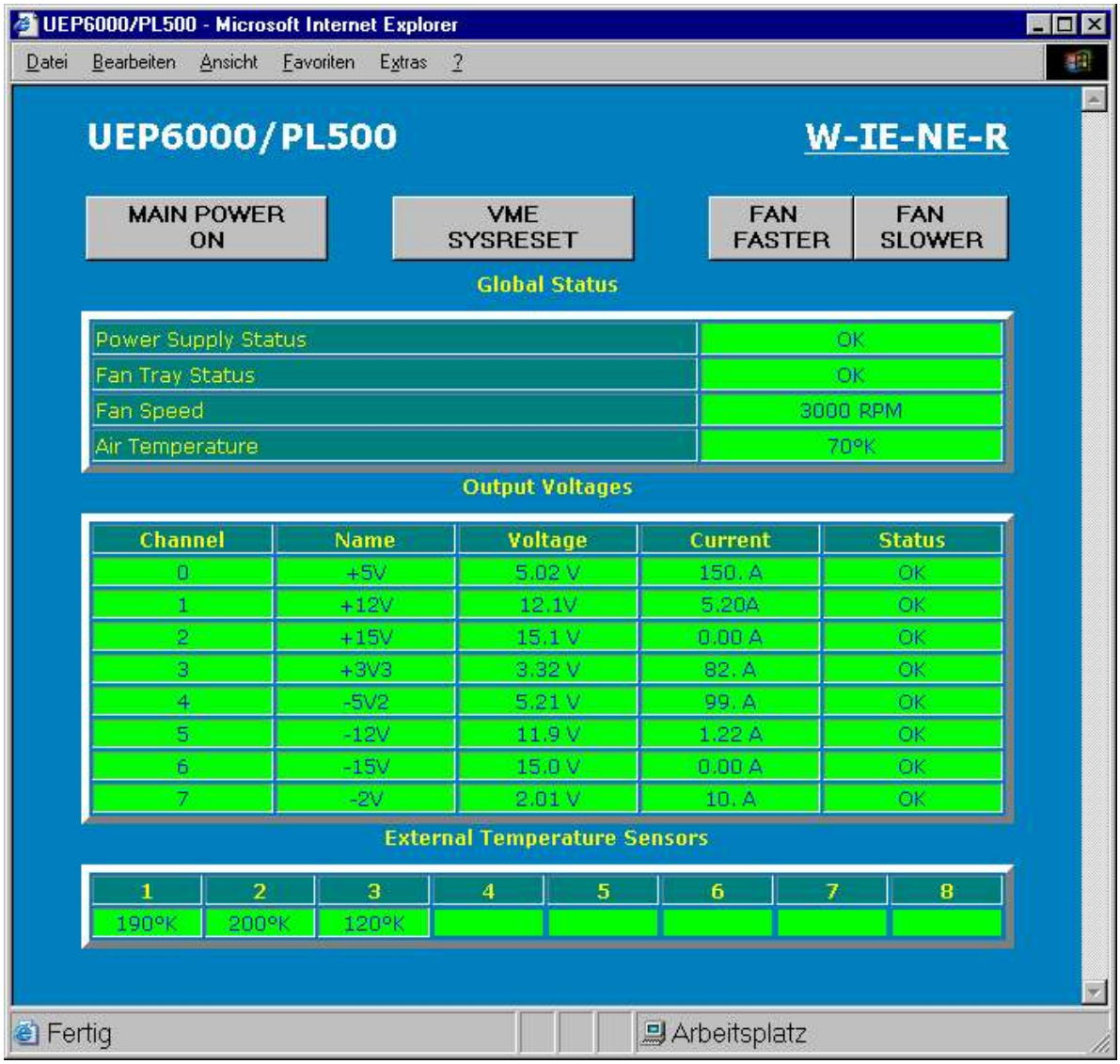
1 Introduction

Supported TCP/IP protocols:

Internet	*Datagram*	*Protocol*	*Port*	*Reference*	*Comments*
ARP			-	RFC 826	
IP	ICMP	ECHO	-	RFC 792	
IP	TCP	TELNET	23	RFC 854	Connection to the RS232 port only.
IP	TCP	HTTP	80	RFC 1945	WWW Interface
IP	TCP		69	wiener	Special protocol to access all data.

1.1 Access with an Internet Browser (WWW-Interface)

You can access the crate with any internet browser (we have tested Microsoft Internet Explorer, Netscape Communicator and Linux Konqueror)
Open the connection by typing the address „http://IP.OF.THE.CRATE“, there IP.OF.THE.CRATE is the IP address of the crate (default: 192.168.91.80)
Then the following page is opened.



The vivible items are:

Item	***Description***	***Changable***
Button „ON“	Switch the crate on or off	WWW[1], BINARY
Button „SYSRESET“	Generation of VME SYSRESET	WWW[5], BINARY
Button „FAN FASTER“	Fan speed change	WWW[5], BINARY
Button „FAN SLOWER“	Fan speed change	WWW[5], BINARY
„Power Supply Status“	OK or failure message	
„Fan Tray Status“	OK or failure message	
„Fan Speed“	Middle fan speed of all fan tray fans.	
„Air Temperature“	Inlet temperature of the fan tray.	
Column „Channel“	The number of the output channel, related to the type label (U0...U7).	
Column „Name“	Alphanumeric name of the channel (e.g. +5V)	
Column „Voltage“	The measured voltage at the backplane.	
Column „Current“	The measured current.	
Column „Status“	Status of the channel. Possible is „OK“, „OV“ (voltage too high), „UV“ (voltage too low), „OC“ (current too high), „OVP“ (hardware overvoltage protection), „TEMP“ (power supply temperature too high)	
Refresh Rate	Number of seconds of the automatic refresh (0: no automatic refresh)	WWW, BINARY
External Temperature Sensors	Temperature of the (optional) external temperature sensors	

[1] The WWW access of this function can be disabled (see BINARY protocol).

1.2 Access with Special Software (Binary Interface)

The protocol of the binary data transfer is similar to the TFTP (trivial file transfer protocol)[2].

It is possible to read all and write (change) some data items. (Some items are stored in the power supply flash ROM, other items are stored in the fan tray EEPROM)

Overview of the items

Short Name	***Description***	***Readable***	***Writable***
Status	Bit field (on/off, voltage ok, current ok, ...)	yes	No
Control	Switch on/off, change nominal fan speed, ...	no	Yes
UI	Measured voltages, currents	yes	No
Temp	Measured temperatures	yes	No
Fan	Real fan speed of all fans	yes	No
Vers	Data protocol version number	yes	No
VersFan	Fan tray software version	Yes	No
VersPS	Power supply software version	Yes	No
SerNoFan	Fan tray serial number	Yes	No
SerNoPS	Power supply serial number	Yes	No
TimeFan	Fan tray operating time	Yes	No
TimePS	Power supply operating time	Yes	No
Unom	Nominal output voltage	Yes	Yes
Ufine	Output voltage fine adjust	Yes	Yes
Inom	Nominal current limit	Yes	Yes
Umin	Minimum output voltage for good status.	Yes	Yes
Umax	Maximum output voltage for good status	Yes	Yes
Imax	Maximum output current for good status	Yes	Yes
OVP	Crow-Bar detection threshold	Yes	Yes
TempWarn	External temp. sensors warning level	Yes	Yes
TempErr	External temp. sensors error level	Yes	Yes

The details of the data structures and a sample software will be provided at a later time.

[2] RFC 1350