



# DC CONTROLLER

## UPC3

**Battery voltages: 24/48/60/110/220V<sub>DC</sub>**

### KEY FEATURES

- **Extensive battery management**
- **“Hot plug-in” design with backplane connection**
- **1/4 x 19”, 3U**
- **Easy in use and programming**
- **Free programmable signalling concept**
- **CAN-Bus interface**
- **Integration of external alarm structures possible**
- **Remote control and monitoring via direct PC link, modem or SNMP**

### PRODUCT DESCRIPTION

DC Controllers of the new UPC3 series are integrated units for control, monitoring and signalling of DC-power supply systems with battery backup. The units are easy to use and programmable via the buttons at the front panel or USB interface in combination with PC software. On the basis of a free programmable signal matrix, the customer is able to configure several alarms to groups and which of all the signalling outputs are to be used.

The unit is equipped with control outputs for LVD and PLD relays. The control of the rectifier modules is realised via a CAN communication bus. For remote monitoring the use of a direct PC link, modem or SNMP is possible. A special PC software (MMT) for remote monitoring and parameter adjustment is available. Due to the system wide CAN communication concept each of our modular power supplies such as DC/DC converters, inverters and static bypass switches can additionally be monitored by the UPC3.

The functionality of the basic module can be extended using external CAN nodes.

### APPLICATIONS

DC power supply systems with battery backup in all areas of industry, telecommunication, power generation and power distribution.



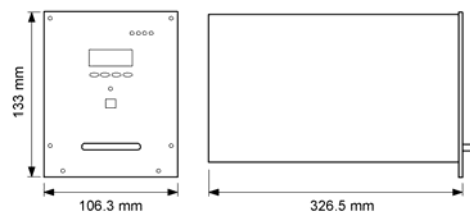
# TECHNICAL DATA

Type	UPC3-24	UPC3-48/60	UPC3-110	UPC3-220
Article code	301-003-498.02	301-003-598.02	301-003-798.02	301-003-898.02
Supply voltage range	18-35VDC	35-75VDC	80-160VDC	180-300VDC
Voltage measuring range	0-100VDC	0-100VDC	0-300VDC	0-300VDC
Current measuring range	0-60mV (shunt value programmable)			
Power consumption	approx. 3W			
Voltage measuring inputs	3; display accuracy 0.5% ±1digit			
Current measuring inputs	1x +/-60mV; 2x +60mV; display accuracy 1% ±1digit			
Temperature measuring input	2x (sensor KTY81-220)			
Digital inputs	8 (isolated)			
LCD display	2x 16 characters; background illuminated			
LED indications	Operation (green); System OK (green); Isolation measurement (yellow); Alarm (red)			
Relay outputs	6 (isolated; max. 0.5A @ 60VDC); expandable with CAN node DCC-RB6 to max. 12 relays			
Interfaces:				
USB interface	USB connector			
CAN interface	Proprietary CAN protocol			
LVD/PLD-drive	3x optocoupler output for control of three LVD relays, alternatively for one LVD and two PLD relays			
Modem connection	Internal modem socket (modem board optional, analog or ISDN))			
SNMP connection	Internal SNMP adapter socket (SNMP adapter optional)			
Controller functions	Temperature compensated float charge, boost charge, battery test; boost charge automatic (power, voltage and time related), LVD control, PLD control; time controlled battery test; charge current limitation; dropping diode control (double-stage)			
Monitoring functions	Battery voltage, battery tap voltage, battery charge current, battery operation; isolation fault, battery voltage low, battery voltage high, CAN bus status, CAN connected module status; external alarm loops, internally switchable isolation measurement			
Event history function	Text message of active faults; flash-based stack memory of last 250 faults/events with time stamp			
Battery test memory	Storage of the last 3 battery test results; storage of the last battery test curve			
RTC with time and date	Yes			
Control buttons	4; UP/DOWN/ENTER/ESC			
Languages	German, English, Swedish; other versions loadable on demand			
Ambient temperature	Operation: -20°C to +55°C; non condensing; storage: -40°C to +85°C			
Cooling	Convection cooling			
Climatic conditions	according to IEC 721-3-3 class 3K3/3Z1/3B1/3C2/3S2/3M2			
Max. installation altitude	≤ 1500m			
Audible noise	<30dBA			
Type of construction	1/4 x 19", 3U			
Dimensions (W/H/D)	106.3/133/326.5mm			
Weight	approx. 1.8kg			
Type of enclosure / Protection class	IP20 (front panel) / 1			
Colour (front panel)	RAL 7035, neutral, black print RAL 9005			
CE conformity	yes			
Compliance to safety standards	EN60950-1; VDE0100 T410; VDE0110; EN50178; EN60146			
Compliance to EMC standards	EN55011/22 class "B"; EN61000-4 T2-5			
Connections	1x DIN41612-M-connector 2x32-pole			

## OPTIONS

Article code	Designation
302-UP3-MMT.00	Configuration software "Multi Management Tool" (MMT)
302-003-RDD.00	Remote display for door mounting; connection via CAN interface
302-DCC-0MM.00	Mains monitoring board 1/3 phase; DIN rail module; connection via CAN interface
302-DCC-0BM.00	Battery monitoring board DCC-BMB (for one additional battery string; U,U/2,I,T); DIN rail module; max. six modules DCC-BMB applicable
302-DCC-DI8.00	Signalling board with 8 digital alarm inputs; DIN rail module; connected via CAN interface
302-DCC-ORB.00	Relay board with 6 isolated signalling outputs; DIN rail module; connected via CAN interface
302-DCC-0FM.00	Fuse monitoring board (20 fuses, 24-60VDC, 1-pole); open frame
302-UP3-SMP.00 302-UP3-0SW.02	SNMP adapter ; plug-in board; connection via Ethernet 10Base-T; SNMP monitoring software (Win)
302-UP3-0AM.00 302-UP3-0SW.01	Analog modem; plug-in board; connection via analogue phone line; Western RJ11; Remote software for analog modem
302-UP3-MOB.00	Mod-Bus adapter
300-UP3-PRO.00	Profi-Bus adapter
302-TMP-KTY.04	Temperature sensor KTY81-220 T092 incl. connecting cable 4m in length; 2 wires à 0,34mm²

## DIMENSIONS



DS\_UPC3\_E\_R08 - Subject to change without notice - Eltek Valere Deutschland GmbH

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