

# HYterm ULTRACAP



ULTRACAP is a DC UPS based on ultracapacitor technology. Provide energy to the control system in the time between power failures and initiation of backup power systems, such as diesel generators or fuel cells. It is used in sectors where continuity of service is required such as process industry and data centers.

## MAIN FEATURES

### Integrated with FC400

Combined with FC400 it is able to communicate its activation to the building management system, ensuring continuity of service and rapid intervention by maintenance teams.

### Compact and lightweight

It doesn't require the use of batteries, reducing the size and weight.

### Maintenance-free

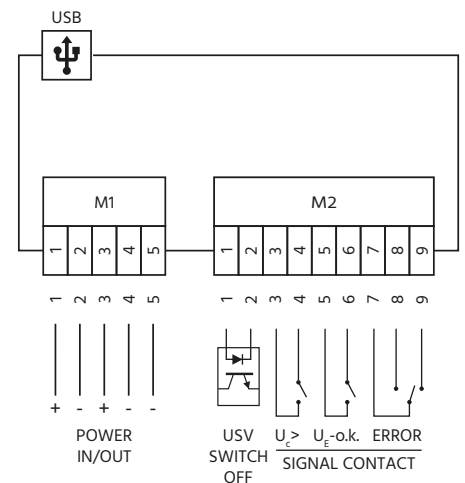
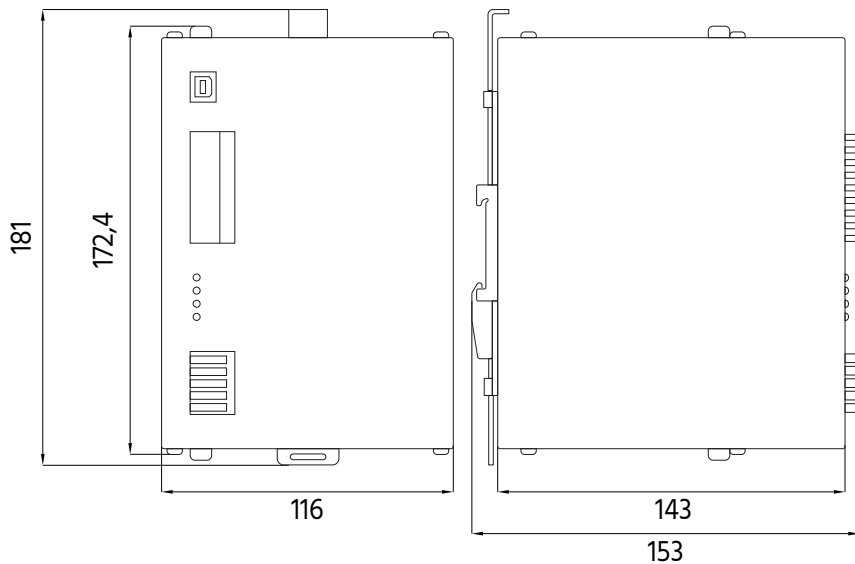
Thanks to the long life and high capacity ultracapacitor technology, no maintenance is required.

## BENEFITS

- Integrable with FC400.
- Maintenance-free due to long-life ultracapacitors.
- Microcontroller-based charging and discharging of the ultracapacitors.
- Operating and charging status monitoring via LEDs.
- Superfast charging due to active charging current control.
- IPC management due to shutdown function triggered by time and output current.
- Several customer-specific parameterisation options via USB interface

INPUT	
Rated input voltage	12 V DC / 24 V DC (SELV / PELV)
Input voltage range for charging mode (12 V DC)	Decoupled: 11,9 - 17,4 V DC $\pm 0\%$ Not decoupled: 11,4 - 17,4 V DC $\pm 0\%$
Input voltage range for charging mode (24 V DC)	Decoupled: 23,9 - 27 V DC $\pm 0\%$ / Not decoupled: 23,4 - 27 V DC $\pm 0\%$
Rated input current	10 A @ (U <sub>e</sub> = 24,0 V DC, U <sub>a</sub> = 23,2 V DC, I <sub>a</sub> = 9,9 A)
Switch-on current	$\leq 35$ A / 2 ms
Charging current	Max. 7 A; active charging current control
Rated input power	240 W @ (U <sub>e</sub> = 24,0 V DC, U <sub>a</sub> = 23,2 V DC, I <sub>a</sub> = 10 A)
GENERAL	
Degree of protection	IP20
Overvoltage category	II
Pollution degree	2
Dimensions	170 × 189 × 147,9 mm   27,6 kJ (kWs) 172,4 × 116 × 143 mm   13,4 kJ (kWs) 172,4 × 116 × 143 mm   5,8 kJ (kWs)
Weight	3,6 kg   27,6 kJ (kWs) 2,2 kg   13,4 kJ (kWs) 1,8 kg   5,8 kJ (kWs)
Operating temperature	-40÷60°C
Storage temperature	-40÷60°C
Relative humidity	$\leq 95\%$

Rated output voltage	12 V DC / 24 V DC
Rated output voltage (12 V DC input voltage)	11,2 V DC $\pm 4\%$
Rated output current	10 A
Current limiting in buffer mode	11,25 A $\pm 0,75$ A
Limit current monitoring in buffer mode through shutdown	10,3 A $\pm 0,1$ A after 1,5 s
Energy content (typical)	27,6 kJ (kWs) @ (U <sub>a</sub> = 23,2 V DC, I <sub>a</sub> = 2 A) 13,4 kJ (kWs) @ (U <sub>a</sub> = 23,2 V DC, I <sub>a</sub> = 2 A) 5,8 kJ (kWs) @ (U <sub>a</sub> = 23,2 V DC, I <sub>a</sub> = 2 A)
Efficiency	95,1% @ (U <sub>e</sub> = 24,0 V DC, U <sub>a</sub> = 23,2 V DC, I <sub>a</sub> = 10 A)
Internal consumption in buffer mode	1,7 W
Short circuit withstand capability	Mains mode: Conditional short-circuit proof Buffer mode: Short-circuit proof
Fusing - output	External
STANDARD	
Total device	2011/65/EU with 2015/863/EU (RoHS) 1907/2006/EC (REACH) 2009/125/EC (Ecodesign) EN 61010-1 / EN 61010-2-201 / EN 62368-1 UL 508 / C22.2 No. 107.1
EMC	2014/30/EU (EMC Directive) EN 62040-2 Limit Value Class C1 EN 55011 + A1 Limit Value Class B Group 1 EN 61000-6-2, EN 61000-6-4



PRODUCT	DESCRIPTION	CODE
UC100	DC-UPS Capacitors In.24 Out.24 10A 5,8kJ	12.003.00.0000
UC200	DC-UPS Capacitors In.24 Out.24 10A 13,4kJ	12.003.00.0001
UC300	DC-UPS Capacitors In.24 Out.24 10A 27,6kJ	12.003.00.0002