# Universal-Timer UT 3020

- Versatile applicable smart card operated timer using contactless Mifare<sup>®</sup>-smart cards
- LC-display with 2 x 16 characters
- Two independent relays
- Credit time digitally adjustable (2 prices)
- Display of remaining time or amount
- A shutter prevents the insertion of coins and other foreign objects



- All settings are accessible from outside by inserting the setup-card
- Valorization of smart cards by using our TAW 500, a special valorization smart-card (in combination with the UT 3020) or our wall mounted valorizer
- · Cash audit by interim- and total counter
- Start and stop input
- Change to second price by separate input
- External button, to release the connected device for 5 seconds, connectable
- Optional functions:
  - Key operated switch to start the connected device for free
  - Acoustic signal indicates the last minute
  - Ethernet connection (Ethernet 10/100Mbit)
- Made in Germany

### General:

The UT 3020 is a variable timer which time is depending on the debited amount. It can be used as timer for solarium, showers, vacuum cleaners, washing machines, car wash and so on. So, it is universal usable.

After inserting the smart card the customer can select the desired time. By pushing the green button the corresponding amount will be debited and the timer starts.

By using the contactless Mifare<sup>®</sup>-smart cards the UT 3020 is reliable, maintenance-free, and protected against manipulation.

All settings and data are saved in a power failure secure memory. After power on the device again, all settings and data will be restored.



## Technical Data - UT 3020

#### General

<ul> <li>Robust steel housing and safety lock</li> </ul>				
Dimension in mm:	285 (W) x 139 (H) x 136 (D)			
Colour:	RAL 9002 (light-grey)			
• Weight:	3,1 kg			
Safety class:	1			
Type of protection:	No moisture proofing, enclosed design			
Ambient temperature:	+060ºC			
Humidity:	1090% non-condensing			

#### **Connection data**

Interface board

· Connection for power supply

· Connection for start- and stop-switch

Operation Voltage:     or	220-240V AC, 50-60Hz, 8VA 24V AC/DC, 350mA
Switching power K1:     resp.	250V AC/16A 30V DC/16A
Switching power K2:     resp.	250V AC/16A 30V DC/16A
Electrical safety:	CE-sign

• Two relays : Credit relay (K1) and additional relay (K2)

· Connection for key operated switch (use for free)

· Connection to change to second price (external)

All inputs and outputs are galvanic isolated

#### **Control board**

•	Modern	switched	mode	power	supply
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- · Connection for LC-display
- Connection for serial interface, realtime clock
   or network-module
- · All inputs and outputs are galvanic isolated
- Power failure detection for automatic saving all settings and data in the EEPROM

#### Settings

- All settings will be done by using four buttons and the LC-display
- Credit time: Two different prices adjustable
   (respectively price, time & min. credit)
- Lead time: 0s till several hours
- · Follow-up time: 0s till several hours
- Display mode: Remaining time or remaining credit
- Different operating modes for the start and the stop input, as well as for the additional relay K2
- · Access code for the settings (off / 0..9999)

#### Network interface (Option)

- RJ45-connector for Ethernet-networks
- 10/100Mbit
- Comfortable administration of all settings via Windows<sup>®</sup>-Software
- Read out of the sales data via Windows<sup>®</sup>-Software

