Battery Charger / Analyzer UL60
- 40 Volt / 60 Ampere -

Highlights

- Reliable capacity test in accordance with maintenance instructions
- Fully automated processes implemented
- Ethernet interface and USB-Port
- Manufacturer-independent and universal usage

Product Description

The networkable UL60 is a charging, discharging and maintenance device for the professional capacity measurement of aircraft, rail and UPS batteries. All rechargeable NiCd and Lead-Acid (optional Lithium-Batteries) for aircrafts with

- rated voltages between 1.2 and 28.8 V and
- capacities between 1 and 900 Ah
  - NiCd aircraft: max. 60 Ah with $C_1$
  - NiCd others: max. 230 Ah
  - Lead acid: max. 900 Ah (limit set by device settings)
  - Lithium: max. 60 Ah with $C_1$

can be optimally maintained with individual programs complied with manufacturer’s maintenance manuals. All programs can be selected menu guided via console. Main feature is the capacity test of NiCd and Lead-Acid (optional Lithium-Batteries). Focuses of the new UL60 are process optimizations and reliability of aircraft batteries maintenance.
Particularly the maintenance of the aircraft batteries is type specific and has to comply with manufacturer’s maintenance manuals.

The UL60 can fulfill these requirements. When using an automatic cell tester, the UL60 can perform fully automated process cycles without any manual intervention. The only exception is the adjustment of the battery electrolyte level. For measurement and recording of single cell-voltages the UL60 provides with a designated program. The UL60 is network compatible via Ethernet with TCP/IP-protocol. Thus it is possible to work with remote display, data logging and connected network printers for recording of measurements.

Nortec Electronics

Protocol 12.10.18
NORTEC
2013-28 UL60 V 1.47 11.07.18
SN: 160 031
--------------------------------------------------------------------
Date: 16/09/18
Battery No: 1255A
Operator No: 01
Nom. voltage: 24.00 V
Rated cap: 412 Ah
Program: 412
Ph battery vented ML P+3 C Orion Maintenance
--------------------------------------------------------------------
Program start 04:47:12
Voltage 28.49 V
Program start 04:47:12
Voltage 28.49 V
--------------------------------------------------------------------
P412:01: 10:49:11
Discharge 1 Voltage 18.03 V
Current 29.90 A
Capacity 32.3 Ah
Time 61 MIN
Temperature 28.0 °C
--------------------------------------------------------------------
P412:01: 15:50:36
Discharge 2 Voltage 18.01 V
Current 25.99 A
Capacity 32.3 Ah
Time 45 MIN
Temperature 29.0 °C
--------------------------------------------------------------------
P412:04: 31:04:23
Battery evaluation
C110%: Battery is OK
Capacity 32.3 Ah
Program automatically finished
--------------------------------------------------------------------
P412:05: 07:56:56
U-Charge 1 Voltage 28.49 V
Current 05.99 A
Capacity 30.1 Ah
Time 36 MIN
Temperature 23.0 °C
--------------------------------------------------------------------
P412:05: 15:50:16
U-Charge 2 Voltage 28.49 V
Current 01.19 A
Capacity 30.1 Ah
Time 120.3 MIN
Temperature 24.0 °C
--------------------------------------------------------------------
P412:05: 02:26:16
Battery evaluation
C110%: Battery is OK
Capacity 32.3 Ah
Program automatically finished
--------------------------------------------------------------------
P412:05: 15:50:36
Printout with laser printer via Ethernet
Software updates and data logging by USB

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www.nortec.de  www.battery-charger-analyzer.de
Our know-how is YOUR advantage

✓ MAINTAIN ALL STANDARD AIRCRAFT BATTERIES
✓ Charge and discharge with CONSTANT CURRENT (0.1 to 60A)
✓ FULLY COMPLIANT to manufacturers CMM’s
✓ PROCESS SHORTENING and IMPROVEMENT OF MEASURING ACCURACY
  by battery adapters for automatic cell measurement
✓ ONE DEVICE – no additional software or hardware required
✓ SOFTWARE UPDATES by yourself via USB or RS232 interface
✓ CALIBRATE by yourself with PG-UL60
✓ 32 kg only
✓ High quality MADE IN GERMANY
✓ NSN: 6625-12-398-1233

The right equipment for YOUR specific application

<table>
<thead>
<tr>
<th>Charger/Analyzer</th>
<th>UL60</th>
<th>UL60-L</th>
<th>UL35</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output (charge/discharge)</td>
<td>0.5 - 40VDC / 0.5 - 60A</td>
<td>0.5 - 40VDC / 0.5 - 60A</td>
<td>0.5 - 40VDC / 0.5 - 35A</td>
</tr>
<tr>
<td>Automatic cell measurement adapter</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Ethernet 10BASE-T (RJ45) for external laser printer and remote monitoring</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>USB 2.0 for data logging</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>RS232</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Integrated printer</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Weight (without charging cables)</td>
<td>32 kg</td>
<td>32 kg</td>
<td>32 kg</td>
</tr>
</tbody>
</table>
Technical Data

Product name: UL60 Charger/Analyzer
Part number: UL60.040000
Mains voltage: 230VAC ±10% / 45-65Hz
Input power: 3000VA
Output (charge/discharge): 0.5 - 40VDC / 0.5 - 60A
(> 31VDC / max. 40A)
Display: TFT display, 7"
Display languages: German, English, French, Russian, Danish, Dutch
(further languages on request)
Battery types: Nickel-Cadmium, Lead-Acid (optional Lithium-Battery)
Interfaces: Ethernet 10BASE-T (RJ45) for PC or printer connection,
USB 2.0 Host for software updates and data logging,
RS232 for software updates
Protection: IP20
Ambient temperature: 0°C to +45°C
Dimensions (W x H x D in mm): 504 x 270 x 400
Weight: 32kg without charger cables
Accessories: Various types of charging cables, cell measurement adapters for automated voltage and temperature metering on each cell
Programs: Compliant to Maintenance Manuals SAFT, Hawker® (former VARTA), Marathon Norco Aerospace®, Concorde, Gill;
Charge, discharge, residual discharge, capacity test, constant voltage, constant current

Remote-Display: