

# DALTON

Three Phase Input Single Phase Output UPS  
Online Double Conversion  
Smart Pure Sinewave



## U31 Series (10,15,20KVA)



- Dalton U31 for high single phase loads is aspire to introduce the latest DSP true on-line double conversion UPS for protecting small and medium sized mission medical, critical & IT loads so as to safeguard your valuable equipment and critical data from any interrupted power, such as surges, blackouts and lighting strikes.

- Transformer less UPS Technology
- High Efficiency 93%
- Output Short Circuit and Overload Protection
- Maintenance Bypass Switch
- High Input Power Factor
- Charge / discharge Current Indicator
- Optional SNMP Communication Port
- Output Current Limiting
- Cold Start Function
- Automatic Battery Test
- High Charge Current Capacity
- 15 Years Spare parts Support

# Graphical Display LCD

**Dalton U31** The multilingual LCD display provides direct access to the main UPS functions is fully digital signaling processor (DSP) controlled to provide quality supply, reduces the number of access and hence increases reliability and improve performance.

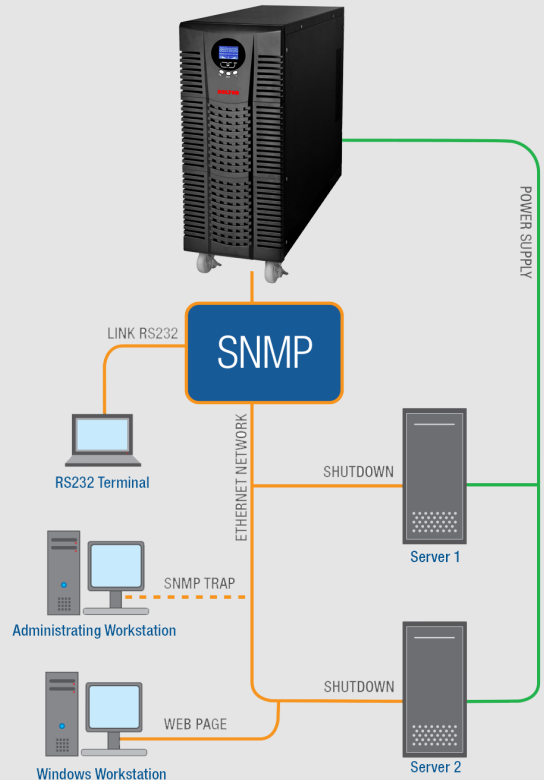


# Simple Network Management Protocol (SNMP)

**Dalton U31** provide a SNMP which is a popular protocol for network management. It is used for collecting information from, and configuring, network devices, such as servers, printers, hubs, switches, and routers on an Internet Protocol (IP) network

Software support most OS for remote monitor and control UPS through LAN, warning notifications through broadcast and mobile phone, multi-shutdown PCs, and schedule UPS self-test. This unique software provides complete power protection for computer system during power failure

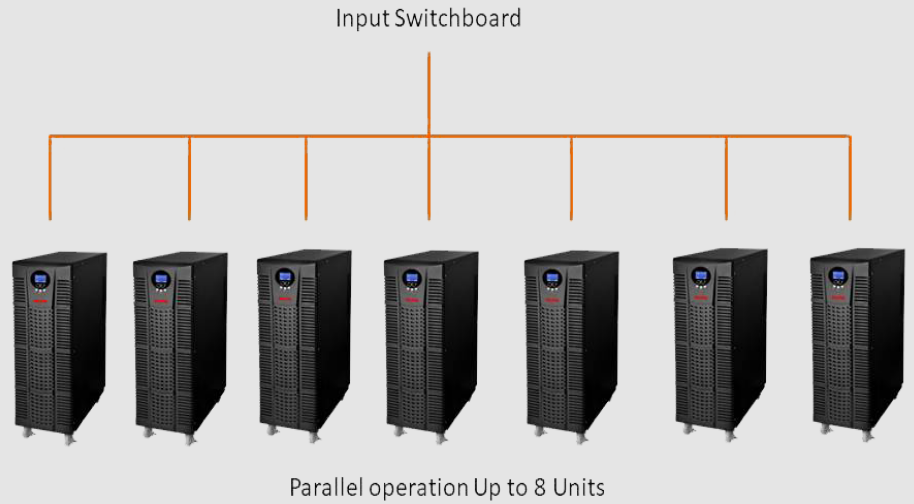
# Direct Connection with Ethernet Network



## Parallel operation

U31 Parallel Redundancy feature provides economic power solution for system Integration. Furthermore, parallel redundancy feature equally share the load to maximize UPS performance, and more secure UPS continuous operation Connects as many as 8 units in parallel for capacity and redundancy to grow with your power requirements. Provides increased backup for greater reliability and ensures continuous operation.

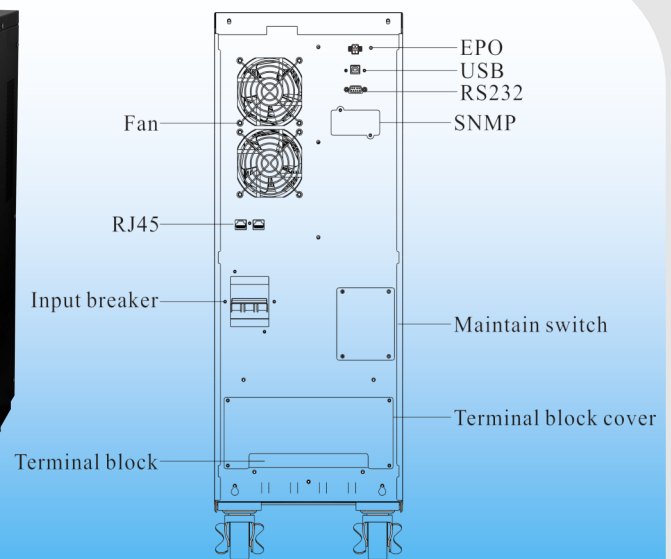
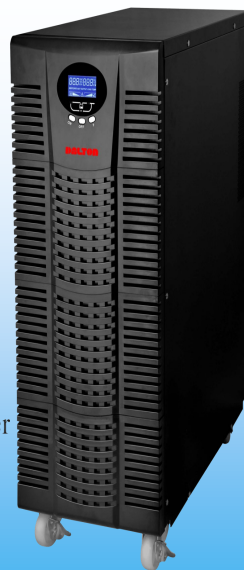
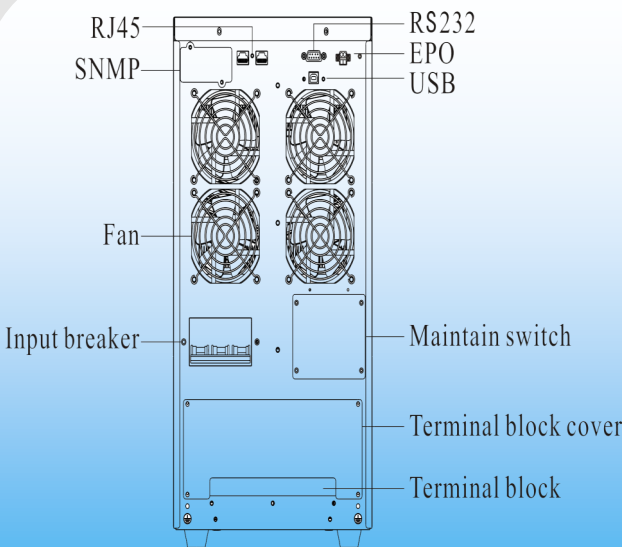
## PARALLEL REDUNDANCY



## Maintenance and Battery Management

Intelligent Maintenance is an essential activity in order to guarantee a safe and stable load protection. Dalton shows maximum care about this topic, providing the best service in terms of experience, instrumentation and safety level. Enables the UPS to transfer the load to utility power without interruption in the event of heavy overload or fault.

U31 multiple levels of service. With package or individual service component options, our services are structured for you to choose what DTM by Dalton can do for you.



FRONT&BACK VIEW OF U31plus

# Technical Specifications

| Model             |  | U31<br>10K  | U31<br>10KS   | U31<br>15K  | U31<br>15KS | U31<br>20K  | U31<br>20KS |  |
|-------------------|--|---|---|-------------|-------------|-------------|-------------|--|
| Rating Power      |  | 10KVA/8KW   |   | 15KVA/12KW  |             | 20KVA/16KW  |             |  |
| Input             | Input system                                     | 380-400-415Vac ( 3 Phases + N & earth ground )  |   |             |             |             |             |  |
|                   | Voltage range                                    | 274~474VAC(full load)   |   |             |             |             |             |  |
|                   | Power factor                                     | ≥0.99   |   |             |             |             |             |  |
|                   | Frequency  | 40~60Hz (50Hz ) /50~70Hz (60Hz)   |   |             |             |             |             |  |
|                   | Inrush current                                   | Absent  |   |             |             |             |             |  |
| Output            | Output system                                    | 220-230-240Vac Adjustable ( Single Phases + N & earth ground )  |   |             |             |             |             |  |
|                   | Rated voltage                                    | 120VAC / 274VAC   |   |             |             |             |             |  |
|                   | Power factor                                     | 0.8   |   |             |             |             |             |  |
|                   | Voltage precision                                | ±2%   |   |             |             |             |             |  |
|                   | Voltage distortion                               | Linear≤3% on R 100% loading (line)  |   |             |             |             |             |  |
|                   | Output waveform                                  | Pure Sinewave   |   |             |             |             |             |  |
|                   | Output frequency                                 | Normal mode   | (1)synchronized 46~54Hz<br>(2)50Hz(line 40~46 or 54~60Hz) |             |             |             |             |  |
|                   |  | Battery mode  | 50Hz,60Hz   |             |             |             |             |  |
|                   | Inverter overload capacity (Utility power, 25°C) | 105% - 125% transfers to bypass mode after 1 minutes; 125% ± 5%< load ≤ 150% ± 5% transfers to bypass mode after 30second |   |             |             |             |             |  |
|                   | Transfer time                                    | 0ms   |   |             |             |             |             |  |
|                   | Unbalanced load                                  | 100% - independent phase regulation   |   |             |             |             |             |  |
| Crest factor      | 3:1  |   |   |             |             |             |             |  |
| DISPLAY INTERFACE | LCD Display                                      | AC/ DC voltages; KVA/ KW; Frequency; Temperature; Battery & load level  |   |             |             |             |             |  |
|                   | LED Status Indicator                             | Utility power; Battery discharge; Inverter On   |   |             |             |             |             |  |
|                   | External Communication                           | RS232 / RJ11 / USB Card / Optional Intelligent Slot   |   |             |             |             |             |  |
|                   | Control  | 3 control push button for POWER ON / POWER OFF / FUNCTION KEY   |   |             |             |             |             |  |
|                   | Communication software                           | Windows XP/ 2003 and later version; Linux; Unix   |   |             |             |             |             |  |
|                   | Optional   | SNMP Card/ Dry Contact AS400 Card/ CMC Card/ RS485 Card/ EMD Monitoring Device  |   |             |             |             |             |  |
| Battery           | Batteries voltage                                | 240VDC  |   |             |             |             |             |  |
|                   | Battery Type                                     | Sealed maintenance-free lead –acid battery / Gel Battery / NiCd   |   |             |             |             |             |  |
|                   | Backup Time (25°C)                               | Full load ≥ 10min (Standard)  |   |             |             |             |             |  |
|                   | Recharge curve                                   | Ripple free; IU (DIN 41773)   |   |             |             |             |             |  |
|                   | Battery quantity                                 | 20  |   |             |             |             |             |  |
|                   | Charge current                                   | 1.5A  | 7A  | 1.5A        | 10A         | 1.5 A       | 15 A        |  |
| General           | Temperature                                      | 0°C-40°C  |   |             |             |             |             |  |
|                   | Humidity   | <95%  |   |             |             |             |             |  |
|                   | Altitude   | <1000m  |   |             |             |             |             |  |
|                   | Efficiency                                       | Line: ≥ 93%   |   |             |             |             |             |  |
|                   | Inputs   | ECO/EPO   |   |             |             |             |             |  |
|                   | Noise (dB)                                       | ≤ 55dB  |   |             |             |             |             |  |
|                   | Maximum parallel units                           | Up to 8 units   |   |             |             |             |             |  |
|                   | Positioning                                      | Min. 20cm rear space for fan ventilation  |   |             |             |             |             |  |
|                   | Protection                                       | IP20  |   |             |             |             |             |  |
| L*W*H (mm)        |  | 560X260X717   | 533x260x501   | 717x260x740 | 533x260x501 | 717x260x740 | 533x260x501 |  |
| Weight (kg)       |  | 72  | 40  | 91          | 57.5        | 111         | 62.5        |  |

## DALTON

Dalton Power (UK) Ltd | Unit 3 Narberth Bridge Business Park Narberth SA67 8RF | United Kingdom

Tel: +44 (0) 190 557 0358 Fax: +44 (0) 183 445 0092 Email: info@daltonpower.co.uk

[www.daltonpower.co.uk](http://www.daltonpower.co.uk)

