PRODUCT DATA

Battery Module for LAN-XI Type 2831-A

Uses:
- *DC power supply for LAN-XI modules and frames*
- *Uninterruptible power supply for frames and modules when connected by Single Module to Battery Power Adaptor ZH-0686*

Features:
- *Capacity: 97 Wh*
- *LED status indicators show the remaining capacity*
- *UPS functionality for frames and single modules*

230037

Battery Module Type 2831-A is a rechargeable Li-ion battery for use with LAN-XI modules and frames and is the same size and shape as a standard LAN-XI input/output module. The battery has a nominal capacity of 97 Wh and provides up to eight hours of operation with a single LAN-XI module or 40 minutes in a full Type 3660-D LAN-XI Frame. Two Type 2831-A batteries can be used simultaneously in a frame to provide up to 90 minutes of continuous battery power for a full D-frame or up to four hours in a full C-frame.

Combined with mains or external DC power supply, Type 2831-A can also act as an uninterruptible power supply (UPS) for a frame or single module, seamlessly powering it if external power is temporarily lost (for example, in a car when the ignition switch is turned). For use with a single module, Power Adaptor ZH-0686 (included) must be connected to the battery/module combination (Fig. 1). The battery and module are assembled with four screws located in the LAN-XI module. This configuration is turned on/off by a switch on the front of the battery module. External power can be supplied either from an external (mains or DC) charger or from an external DC source. If this voltage falls below 10 V, the battery will take over and keep the module active.

On the front panel, an LED level indicator shows the remaining capacity in 5 steps. When using the battery with a stand-alone module, press the ⬚ (battery level) button to view the battery charge. When the battery is used in an externally powered LAN-XI frame the battery indicator is always on, and the charging or remaining capacity level can also be checked on the frame module web page.

The battery module can be charged in a mains-powered LAN-XI frame or, with the module set to **Active**, with a dedicated external charger. Type 2831-A includes a mains powered external charger, ZG-0880. An optional 10 to 30 V DC external charger (for example, in-vehicle charger) is also available as ZG-0858.

Fig. 1   *Connecting the battery module to a LAN-XI module using Single Module to Battery Power Adaptor ZH-0686*

230038

Compliance with Standards

CE ⚠ ♻ 🗑	CE-mark indicates compliance with: EMC Directive and Low Voltage Directive RCM mark indicates compliance with applicable ACMA technical standards – that is, for telecommunications, radio communications, EMC and EME China RoHS mark indicates compliance with administrative measures on the control of pollution caused by electronic information products according to the Ministry of Information Industries of the People's Republic of China WEEE mark indicates compliance with the EU WEEE Directive
Safety	EN/IEC 61010-1 and ANSI/UL 61010-1: Safety requirements for electrical equipment for measurement, control and laboratory use IEC 62133-2:2017 and IEC 62133-2:2017/AMD1:2021: Amendment 1 – Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications – Part 2: Lithium systems This Li-Ion Battery Pack class UN 3480/UN 3481 has passed the UN "Regulation on the Transport of Dangerous Goods" section 38.3 test and complies as such with IATA, ICAO and CAAC transportation regulations
EMC Emission	EN/IEC 61000-6-3: Generic emission standard for residential, commercial, and light-industrial environments CISPR 32: Radio disturbance characteristics of information technology equipment. Class B Limits
EMC Immunity	EN/IEC 61000-6-1: Generic standards – Immunity for residential, commercial and light industrial environments EN/IEC 61000-6-2: Generic standards – Immunity for industrial environments EN/IEC 61326: Electrical equipment for measurement, control and laboratory use – EMC requirements **Note:** The above is only guaranteed using accessories listed in this Product Data
Temperature	IEC 60068-2-1 & IEC 60068-2-2: Environmental Testing. Cold and Dry Heat Ambient Operating Temperature: • 0 to +45 °C (32 to 113 °F), charging • − 20 to +60 °C (−4 to +140 °F), discharging Storage Temperature: − 25 to +70 °C (−13 to +158 °F)
Humidity	IEC 60068-2-78: Damp Heat: 93 % RH (non-condensing at 40 °C (104 °F))
Mechanical (non-operating)	IEC 60068-2-6: Vibration: 0.3 mm, 2 g, 10 − 500 Hz IEC 60068-2-27: Shock: 100 g IEC 60068-2-29: Bump: 1000 bumps at: 25 g
Enclosure	IEC 60529: Protection provided by enclosures: IP 31

Specifications – Battery Module Type 2831-A

Type	Li-ion, rechargeable
Output Voltage	14.4 V (nominal)
Capacity	97 Wh
Typical Operating Time	**Single Module:** 8 hours **In LAN-XI Frame:** • 3660-D (full): 40 min. (2 batteries, 1.5 hours) • 3660-C (full): 1.5 hours (2 batteries, 4 hours)
Level Indicator	Five LEDs showing remaining capacity of battery; software access to charging status and remaining capacity in LAN-XI frame
Status Indicator	Red LED indicating temperature too high, too low, or communication failure in frame
Charging Time	• 3 hours in Type 3660-C-100 or -D-100 frame powered from mains • 3 hours when the frame is powered from external DC* • 2 hours with ZG-0880 mains charger • 3 hours with ZG-0858 DC/In-vehicle charger • **With Wireless Frame Type 3660-A-20x with Battery Module set to Active:** 3 hours with ZG-0880 mains charger, 4 hours with ZG-0858 DC/in-vehicle charger
Battery Lifetime	Approximately 500 cycles
Dimensions	**Height:** 132.6 mm (5.22 in) **Width:** 27.5 mm (1.08 in) **Depth:** 250 mm (9.84 in)
Weight	1.0 kg (2.2 lb)

* Valid for frames with serial numbers >110000, hardware version >2.0

Ordering Information

Type 2831-A   Battery Module for LAN-XI
Includes the following accessories
• ZH-0686: Single Module to Battery Power Adaptor
• ZG-0880: Mains Charger (100 − 240 V)

OPTIONAL ACCESSORIES
ZG-0858   10 − 30 V DC Power Charger with Car Utility Connector