

# **Battery Load Tester**

Model Torkel 950

# PORTABLE, DC LOAD BANK WITH THE FOLLOWING **FEATURES:**

- Up to 15kW, 220A or 500VDC
- Maintain constant current, constant power or constant resistance with auto load adjustment
- **0.1A resolution**
- Can work with additional Torkel units for increased capacity
- 3 meter cable set with compression lugs included
- Shipped in heavy duty case
- Consider using this with the Cx Plus Monitor with DCx modules for battery discharge tests



## **DESCRIPTION**

The Torkel 950 is a DC load bank typically used for discharge testing of battery strings. However, it is incredibly versatile, allowing users to perform DC tests on various types of systems at voltages from 0 to 500VDC. Simply put, the unit operates within its limitations for voltage, current or power. It has maximum limits of 500VDC, 220A or 15kW. Please refer to the curve below to see its amperage capacity at a given voltage.

During testing, all values are stored in the Torkel and can be transferred to a PC via ethernet cable or USB thumb drive where it can be evaluated.

# **SPECIFICATIONS TORKEL 900-SERIES**

- Specifications are valid at nominal input voltage and an ambient temperature of +25°C, (77°F).
- Specifications are subject to change without notice.

#### **Environment**

The instrument is intended for use in high-voltage Application field substations and industrial environments.

## **Temperature**

0°C to +50°C (32°F to +122°F) Operating Power derating at temperatures over +35°C (+95°F)

• Storage & transport -40°C to +70°C (-40°F to +158°F) Humidity 5% - 95% RH, non-condensing

# Shock/Vibration/Fall

 Instrument only ETSI EN 300 019-2-7 class 7M2 • Instrument in ISTA 2A transport case

#### **Altitude**

 Operating 3000 m (10000 ft) Storage 10000 m (33000 ft) • Encapsulation class IP20

# **CE-marking**

• LVD 2014/35/EU 2014/35/EU • EMC 2014/30/EU 2014/30/EU • RoHS 2011/65/EU 2011/65/EU

#### General

 Mains voltage 100 - 240 V AC, 50 / 60 Hz Power consumption 200 W (max) Power interruption 40 ms (max) Protection Thermal cut-outs, Automatic overload protection, Emergency stop button Display 7" LCD, Capacitive touch screen • Available languages Czech, English, French, German, Romanian, Russian, Spanish, Swedish Number of test files

30 (max)

 Test time 240 h (max) **MEASUREMENT SECTION** 

**Current measurement** 

0.0 to 2999.0 A Display range Basic inaccuracy +/- (0.5% of reading +0.1 A) Resolution 0.1 A

# INTERNAL CURRENT MEASUREMENT

#### Range

0 to 220 A • TORKEL 950

# Input for clamp-on probe

0 to 1000 mV DC Range 0.30 mV/A to 100.00 mV/A mV/A-ratio

>1 MΩ Input impedance

# Voltage measurement

0 to 500 V DC Voltage

 Inaccuracy +/- (0.5% of reading +0.1 V DC)

Resolution

10 Hz, Values are saved when change is >10 mV Sample rate

#### **Time measurement**

 Inaccuracy +/- 0.1% of reading 31 digit

## LOAD SECTION

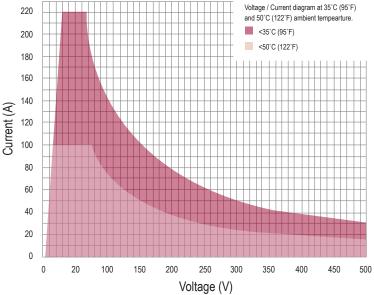
· Battery voltage

7.5 V3) to 300 V1) / 500 V2)

 Power 15 kW (max)

 Load patterns Constant current, constant power, constant resistance, current or power profile

> Voltage / Current diagram at 35°C (95°F) and 50°C (122°F) ambient tempearture.



#### **CONSTANTI**

#### Range

0 to 220.0 A • TORKEL 950 +/- (0.5% +0.2 A) Inaccuracy

0.1 A Resolution

 Ripple max 0.5 A peak

#### **CONSTANT R**

300 m $\Omega$  to 3 k $\Omega$  Range Inaccuracy +/- 1% typical Resolution 100 mΩ

# **CONSTANT P**

0 to 15 kW Range Inaccuracy +/- 1% typical Resolution 10 W

### Inputs

7.5 to 300 V.1) 7.5 to 500 V.2) • +

DC, 300 V DC to ground • I EXT  $\leq 1 \text{ V}$ 

 $\bullet$  VOLTAGE SENSE  $\,$  Impedance to the current terminals is >1  $M\Omega$ 

#### **Outputs**

ALARM

28 V DC, 8 A, 240 V AC, 8 A Relay contact

Devices higher than Cat II must not be attached

TXL STOP

 Relay contact 250 V DC, 0.28 A, 28 V DC, 8 A, 250 V AC, 8 A • 9 V DC 9 V DC, 37% max 100 mA terminals is >1  $M\Omega$ 

# **RELATED RENTAL ITEMS:**

Use with the Cx Monitor with DCx DC voltage sensors and Temperature & Humidity sensors to record all of the information when testing a battery string.



DCX DC VOLTAGE



**CX PLUS MONITOR** 



**T&H PROBE** 

