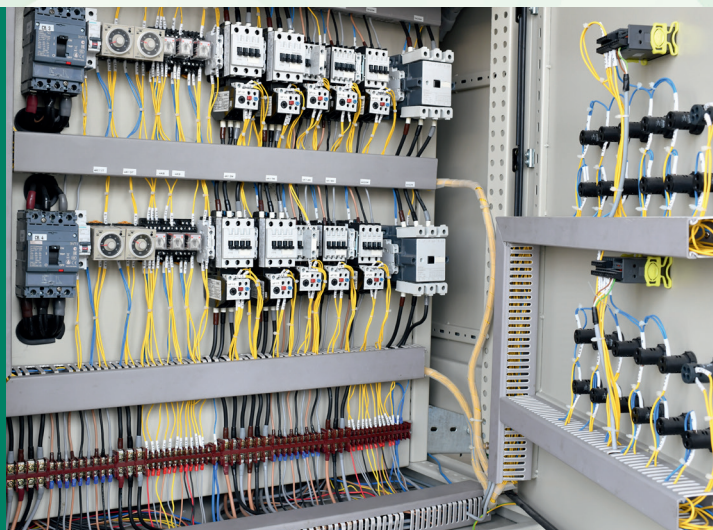


## APPLICATION SHEET

# ASYMMETRICAL DATA LINES



Industrial process equipment has often been connected to controllers using RS232, RS485 or similar communication interfaces. These are unbalanced communication lines with low communication speeds up to 1 Mb/s that can only be used for relatively short distance communication due to their susceptibility to disturbance signals. CE testing using the combination wave/surge and ringwave impulses is required for products having this interface type. In special applications the damped oscillatory wave (DOW) will also be used.

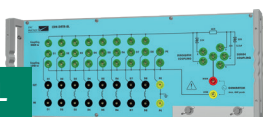
### Test types

- › Combination Wave
- › 100 kHz Ringwave
- › 100kHz and 1MHz Damped Oscillatory Waves

### Standards

- › IEC 61000-4-5
- › IEC 61000-4-12
- › IEC 61000-4-18

#### CDN-DATA-8L



Manual CDN for surge (CWG) and 100 kHz ringwave testing on 4 asymmetrical data lines. Differential and common mode coupling.

#### IMU-MGE



Compact generator for EFT/Burst, SURGE, 100 kHz Ringwave and 10/700 impulses up to 8KV. Integrated 16 A CDN. Extend with ESD, Dips/Interrupts and Common Mode.

#### IMU-MGS



Compact generator for EFT/Burst and SURGE up to 5KV. Integrated 16 A CDN. Extend with ESD, Dips/Interrupts and Common Mode.

### MORE OPTIONS & COMFORT

Specially for use with the Damped Oscillatory Wave (DOW), up to 8 asymmetrical lines can be tested with CDN-DOW-DATA-LF. This meets the test requirements for protection relays mounted in electricity sub stations.



### TEMA3000 - SOFTWARE TEST SUITE

**The ideal solution for our latest test generators.**

Create and manage Tests and Sequences. Integrate DSO measurements in professional reports. Import and export Test Setups and Sequences. Smart test functions and predefined Test Library.



APPLICATION  
INFORMATION