DRL6600U offers an extendable disturbance recording solution, with 10 kHz sampling and the ability to monitor and record GOOSE communication on the station or process bus. It can record up to 96 analog input channels and 192 binary input channels and more as 5000 disturbance recordings can be stored simultaneously.

**Scalable solution for:**
- 32 analog inputs (24I, 8U) and 8 DC inputs
- 48 analog inputs (32I, 16U)
- 64 analog inputs (32I, 32U)
- 80 analog inputs (40I, 40U)
- 96 analog inputs (56I, 40U)

**Functionality**
- Signal indication
- Event recording
- Disturbance reporting
  - Short form report giving a brief overview on an event or recording
- Disturbance recording
  - Pre-trigger: 0 ~ 25 cycles, 1 – 10 kHz
  - Trigger: 0 ~ 50 cycles, 1 – 10 kHz
  - Post trigger: 150 cycles, 0.5 – 10 kHz
- Waveform analysis
  - Sequence and period components
  - Power calculation
  - Harmonics calculation
  - Ranging
- Fault location

**Triggering functions**
- Phase overcurrent, overvoltage and undervoltage
- Positive sequence overvoltage and undervoltage
- Negative sequence overcurrent and overvoltage
- Zero sequence (residual) overcurrent, overvoltage
- Sudden change phase current and voltage,
- Sudden change zero sequence (residual) current and voltage
- Current variation
- Over, under and rate of change of frequency
- Third harmonic overvoltage
- Fifth harmonic overvoltage
- Seventh harmonic overvoltage
- Binary signal triggering

**Secondary system supervision**
- Voltage circuit supervision
- Current circuit supervision
Security, engineering, testing, commissioning, and maintenance
- Authority management
- AE600 – Fault recording analysis software
- MCU – DRL6600U configuration software

Hardware
- 1/1 x 19”, 12U height case
  - IED front panel IP 40
  - HMI front panel and side IP 40
  - HMI and IED back panel, connecting terminal IP 20
- Power supply modules for 110 and 220 VDC
- Up to 96 analog inputs
  - Nominal current 1 A or 5 A
  - Nominal voltage 300 VAC
  - Sampling rate: up to 10 kHz
- 192 binary inputs
  - Maximum input voltage 300VDC
  - Compression type connectors
  - DC inputs
    - 0…10 V, 0…300 V, 4…20 mA
- Accurate time-synchronization through SNTP, IRIG-B or PPS/PPM
- Supports highest EMC requirements. Technical details are available in the Product Guide.
- Independent laboratory certified

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Environmental
- Operation temperature range: -10 ... +55°C continuous
- Short-time service temperature range: -25 ... +70°C (<16 h)
- Relative humidity: <93 %, no moisture condensation
- Altitude: Maximum 2000 m
- Transport and storage temperature range: -40 ... +70°C