



DIRIS Digiware U

Voltage measurement module

Multi-circuit metering
& measurement



DIRIS Digiware U-10/U-20/U-30



Configuration
with EasyConfig,
see page 64.

Function

The **DIRIS Digiware U** module measures voltage for the entire system. This pools together all voltage measurements.

The Digiware RJ45 Bus allows you to pass voltage measurements as well as power supply and communication to all connected products.

Advantages

- 1 single voltage measurement point for the entire system.
- Single point of protection for voltage measuring.
- A complete, dedicated solution:
 - metering,
 - monitoring voltage,
 - quality analysis of the supplied voltage.
- No hazardous voltage on cabinet doors.
- Adapted to all types of network: single-phase, three-phase.

The solution for

- Industry
- Building
- Infrastructure
- Data center



Strong points

- 1 single voltage measurement point for the entire system
- Plug & Play
- Compact



RJ45 (Digiware Bus) cables
are available.

Conformity to standards

- UL E257746



- IEC 61557-12



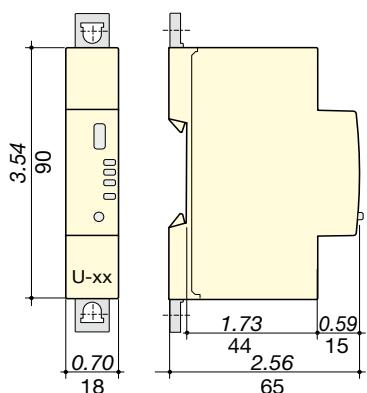
- ISO 14025



Application	Voltage measurement module		
	Metering	Monitoring	Analysis
DIRIS Digiware U			
Multi-measurement	U-10	U-20	U-30
U12, U23, U31, V1, V2, V3, f	•	•	•
U system, V system			•
Ph/N unbalance			•
Ph/Ph unbalance			•
Quality analysis		•	•
THDv1, THDv2, THDv3, THDu12, THDu23, THDu31			
Individual harmonics U & V (up to rank 63)			•
Voltage dips, cutoffs and surges (EN 50160)			•
Alarms			•
On threshold			
History of average values			
45 days (max)			•
Format			
Width/number of modules	18 mm / 1	18 mm / 1	18 mm / 1

Dimensions (in/mm)

DIRIS Digiware U



Specifications

Measuring characteristics

Voltage measurement - DIRIS Digiware U

Characteristics of the network measured	50-300 VAC (Ph/N) - 87-520 VAC (Ph/Ph) - CAT III
Frequency range	45 ... 65 Hz
Frequency accuracy	Class 0.02
Network type	Single-phase/ Two-phase / Two-phase with neutral / Three-phase / Three-phase with neutral
Measurement by voltage transformer	Primary: 400 000 VAC Secondary: 60, 100, 110, 173, 190 VAC
Input consumption	≤ 0.1 VA
Permanent overload	300 VAC Ph/N
Accuracy of voltage measurement	Class 0.2
Connection	Removable screw terminal block, 4 positions, stranded or solid AWG 10 to AWG 32 or 0.2 ... 2.5 mm² cable

Communication specifications

USB

Protocol	Modbus RTU on USB
Function	Configuration of DIRIS Digiware U and I modules
Location	On each DIRIS Digiware U and I measurement module
Connection	Type B micro USB connector

References

Digiware connection cables		Reference
RJ45 cables for Digiware Bus	0.32 feet / 0.10 m length	4829 0181
	0.66 feet / 0.20 m length	4829 0188
	1.64 feet / 0.50 m length	4829 0182
	3.28 feet / 1 m length	4829 0183
	6.56 feet / 2 m length	4829 0184
	16.4 feet / 5 m length	4829 0186
	32.8 feet / 10 m length	4829 0187
	164 feet / 50 m + 100 connectors	4829 0185
Digiware bus terminating resistor (supplied with C and D devices)		4829 0180
USB configuration cable		4829 0050

DIRIS Digiware		Reference
U-10	Metering	4829 0105
U-20	Monitoring	4829 0106
U-30	Analysis	4829 0102

Accessories	To be ordered in multiples of	Reference
Fuse holder Class CC to protect voltage inputs 3 pole	4	5705 0003
Class CC 0.5 A fuses	10	6000 5000