

# Selection Guide - UL/CSA Power Monitoring



POWER  
MONITORING

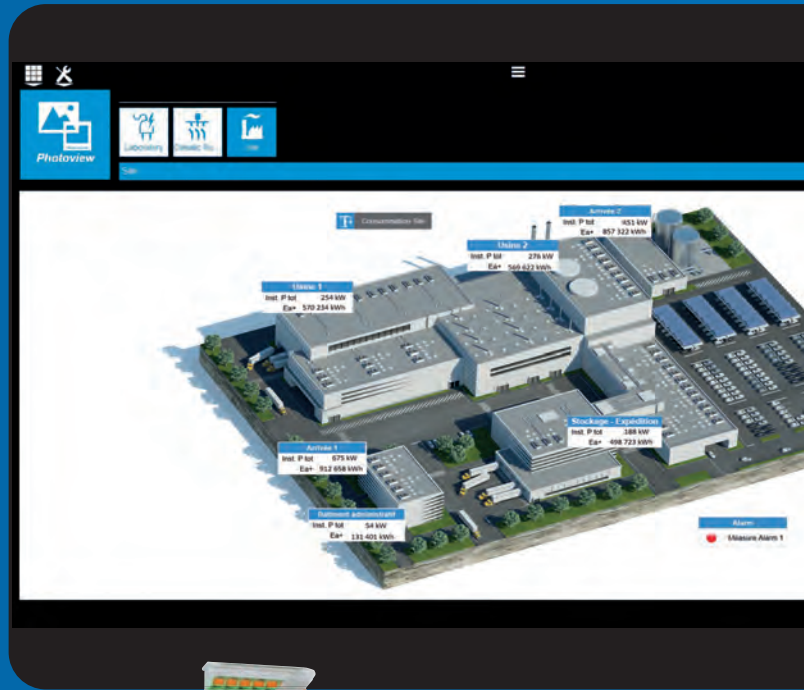
Ed. 3

When **energy** matters



When **energy** matters





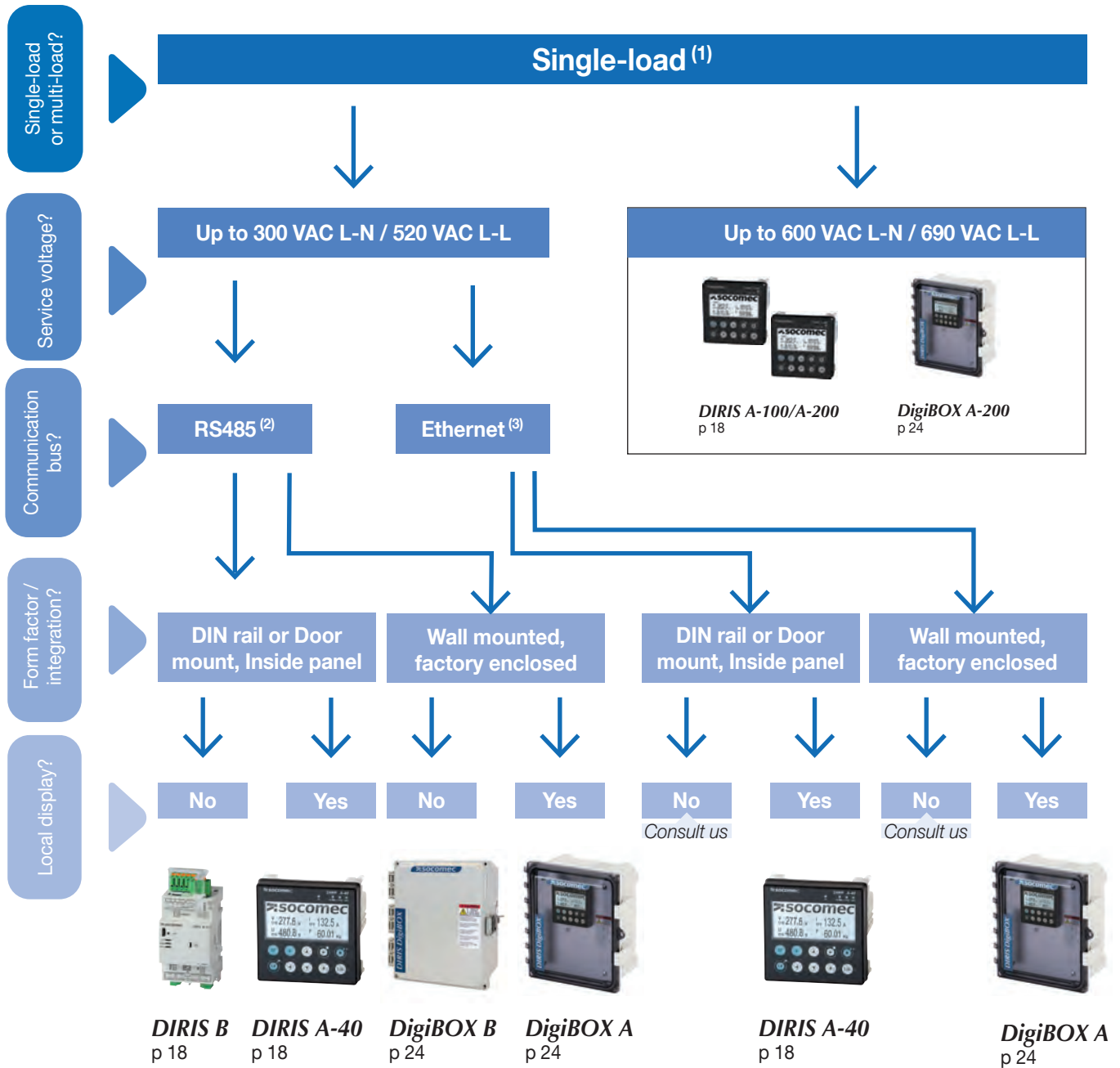
# Metering, monitoring & power quality

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Socomec offers a wide range of power meters serving a variety of applications and market segments.

Power meters are available in different shapes, form factors and functionality levels to address each application's requirements. This is why selecting the right power meter typically requires details about your application and the expected integration.

The below flowchart aims at simplifying the selection process, guiding you towards the right solution through basic questions, but many additional questions can be asked to make this selection even more accurate:



(1) Single-load defined as one three-phase or two-phase or single-phase load

(2) Compatible protocols: Modbus RTU

(3) Compatible protocols: Modbus TCP, BACnet IP

## Typical questions

### Where is the meter going to be installed?

Does the meter need to communicate measurements to a 3rd party system?  
What is the preferred communication protocol?

### Do you need a local display?

How many circuits need to be monitored?  
Are all circuits under the same voltage source?

### What measurement dataset or functionality are needed?

Is a web interface needed to visualize measurements?  
...

## Multi-load <sup>(4)</sup>



Up to 600 VAC L-N / 690 VAC L-L



RS485 <sup>(2)</sup> + Ethernet <sup>(3)</sup>



DIN rail or Door mount, Inside panel



No



**DIRIS Digiware**  
p 8



Yes



**DIRIS Digiware**  
p 8



Wall mounted, factory enclosed



No



**DIRIS MCM**  
p 8



Yes

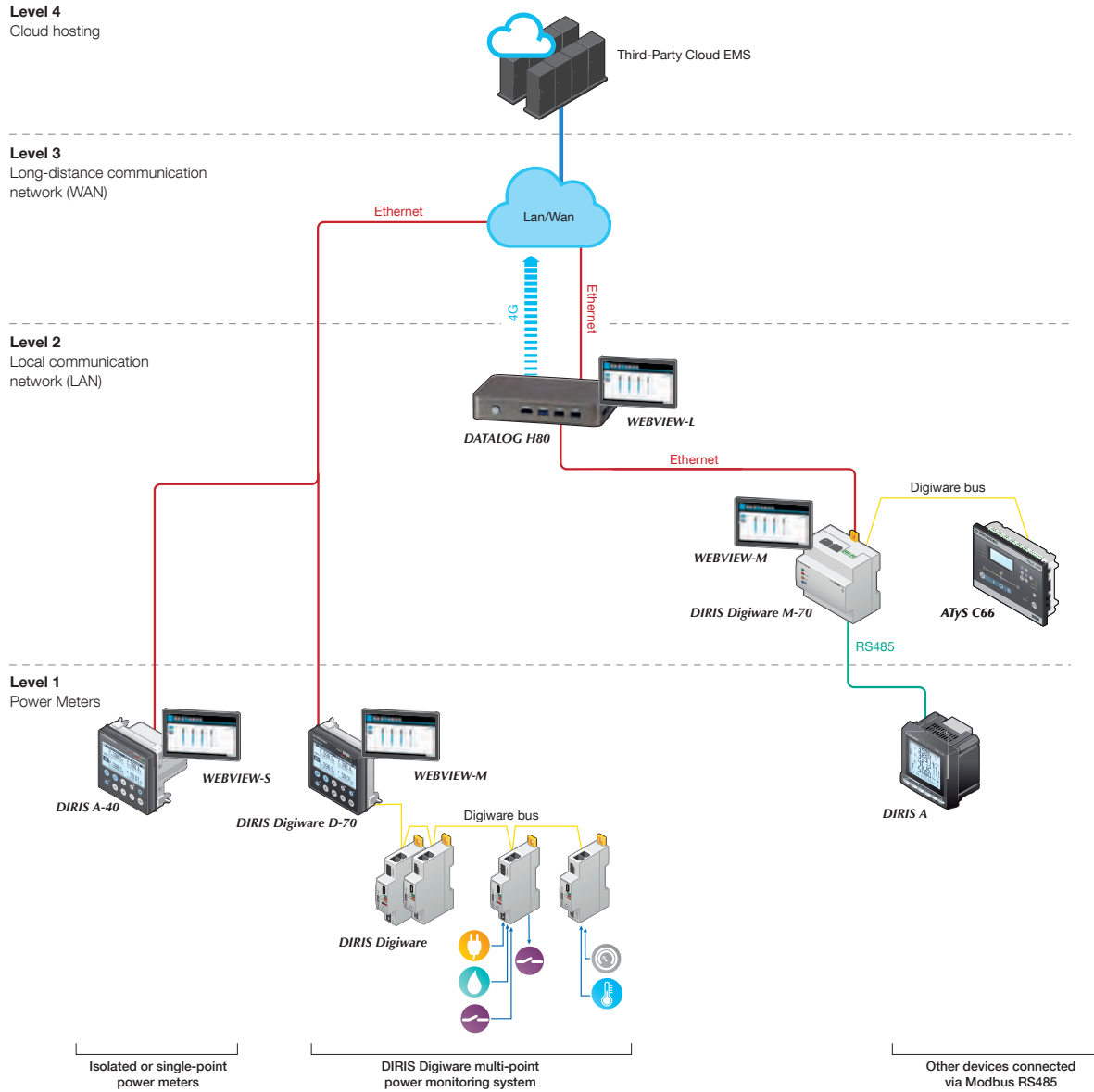


**DIRIS MCM**  
p 28

<sup>(4)</sup> Multi-load defined as multiple three-phase or two-phase or single-phase loads sharing the same voltage source

# Power Monitoring Architecture

## Example



set\_logo\_b\_us

### Expert Services

Our service engineers are an essential part of our team, and they are dedicated to ensuring your power monitoring system provides accurate and reliable measurements to your EPMS software or SCADA system.

Our services include:

- > Site audits to verify the proper wiring of your system
- > Personnel training on how to configure, operate and maintain power monitoring equipment and associated software
- > Remote and on-site commissioning to ensure that your system is up and running quickly, with peace of mind.

For further information, please contact your nearest SOCOMEC branch.



#### References

1/2 day remote commissioning	Remote commissioning including installation verification, programming and communication testing	923 010 0027
1/2 day on-site commissioning	On-site commissioning including installation verification, programming and communication testing	923 010 0004

# Multi-point Power Metering & Monitoring

## *DIRIS Digiware AC & DC*



### Flexible

A modular concept allowing you to customize your own system to monitor any number of circuits within switchboards, panelboards, motor control centers etc



### Versatile

More than just energy metering, the system monitors power quality, breaker status & trips, collects pulses from gas/water meters and reads analog 0/4-20 mA signals.



### Web interface

Access real time and historical measurements remotely thanks to a free built-in web interface on all Ethernet based power meters.



### Multi-circuit

Monitor up to 64 three-phase circuits in one system. With shared communication, power supply, and voltage module, installation time costs and space are significantly reduced.



### PreciSense technology

Unrivalled class 0.5 system accuracy (including current sensors), exceeding revenue grade requirements and ensuring reliable measurements under all conditions.



# Selection Guide

## Multi-point Power Metering & Monitoring

### DIRIS Digiware AC & DC

#### 1 Choose your communication interface

1



or or

*DIRIS Digiware D* display      *DIRIS Digiware M* gateway      *DIRIS Digiware C-31* interface

#### 2 Choose your voltage acquisition module

2




*DIRIS Digiware Uac*  
AC voltage module

*DIRIS Digiware Udc*  
DC voltage module

#### 3 Choose your current acquisition module

3



*DIRIS Digiware S*  
AC current module with (3) integrated current sensors

*DIRIS Digiware BCM*  
AC current module with (21) integrated current sensors

*DIRIS Digiware Iac*  
AC current module

*DIRIS Digiware Idc*  
DC current module

#### 4 Choose your AC current sensors

For *DIRIS DIGIWARE Iac* current modules

4



*RJ12 technology*  
Solid-core, split-core, flexible Rogowski


+

RJ12 cables

#### 4 Choose your DC current sensors

For *DIRIS DIGIWARE Idc* current modules

4



*DC current sensors*

+

RJ12 cables

#### 5 Choose your optional input/output module

5




*DIRIS Digiware IO-10*  
4 digital inputs / 2 digital outputs

*DIRIS Digiware IO-20*  
2 analog inputs

#### 6 Digiware Bus cables

6









To interconnect Digiware  
D/M/C/U/I/S/BCM/IO

Create your project  
[www.meter-selector.com](http://www.meter-selector.com)



**METER SELECTOR**  
DIGITAL TOOL AVAILABLE




**1** Communication interface

DIRIS Digiware	Centralization and display of data				Data centralization	Repeater
						
	M-50	M-70	D-50	D-70	C-31	C-32
<b>Main function</b>						
Centralization of measurements	•	•	•	•	•	-
LCD High-resolution display	-	-	•	•	-	-
Bus Repeater	-	-	-	-	-	•
<b>Power supply</b>						
24 VDC	•	•	•	•	•	•
<b>Communication</b>						
Digiware bus	•	•	•	•	•	•
RS485	Modbus RTU Slave / Master	Modbus RTU Slave / Master	Modbus RTU Slave / Master	Modbus RTU Slave / Master	Modbus RTU Slave	-
Ethernet	Modbus TCP BACnet IP SNMP	Modbus TCP BACnet IP SNMP	Modbus TCP BACnet IP SNMP	Modbus TCP BACnet IP SNMP	-	-
Embedded web server	WEB-CONFIG	WEBVIEW-M	WEB-CONFIG	WEBVIEW-M	-	-
<b>Reference</b>	4829 0221	4829 0222	4829 0204	4829 0203	4829 0101	4829 0103

**Accessories**

Power supply & repeater	Reference
P15 Power supply 100-240 VAC / 24 VDC 15 W	4829 0120
P30 Power supply 100-240 VAC / 24 VDC 20 W	4729 0603

**2** AC voltage acquisition module







DIRIS Digiware			
DIRIS Digiware U	U-10	U-30	U-100
<b>Electrical</b>			
Voltage Measurement	50 - 300 VAC L-N 87 - 520 VAC L-L	50 - 300 VAC L-N 87 - 520 VAC L-L	50 - 600 VAC L/N 90 - 690 VAC L-L
<b>Multi-measurement</b>			
U12, U23, U31, V1, V2, V3, f	•	•	•
U system, V system		•	•
Unbalance U, V		•	•
<b>Power Quality</b>			
THD U, V		•	•
Individual Harmonics U, V (up to 63rd)		•	•
PQ Events (sags, swells, interruptions)		•	•
Waveform capture			
<b>Alarms</b>			
Measurement Threshold		•	•
System alarms	•	•	•
<b>History</b>			
Average Values		•	•
<b>Reference</b>	4829 0105	4829 0102	4829 0108

# Selection guide

## Multi-point Power Metering & Monitoring

### DIRIS Digiware AC & DC






#### 3 AC current modules with integrated current sensors

	S-130	S-135	BCM-2119	BCM-2119VM	BCM-2125	BCM-2125VM
<b>DIRIS Digiware</b>						
<b>Format</b>						
Number of integrated sensors	3	3	21	21	21	21
Maximum current for integrated sensors	63 A	63 A	80 A	80 A	120 A	120 A
Number of external RJ12 sensor inputs (allows to connect TE, TR/ITR, TF sensors)	-	-	3	3	3	3
Breaker pitch / center spacing	18 mm	18 mm	19 mm	19 mm	25 mm	25 mm
<b>Metering</b>						
± kWh, ± kvarh, kVAh	•	•	•	•	•	•
ΣP (kW), ΣQ (kvar), ΣS (kVA), PF	•	•	•	•	•	•
P (kW), Q (kvar), S (kVA), PF per phase	-	•	•	•	•	•
Predictive Power	-	•	•	•	•	•
Load curves / demand profiles	-	•	•	•	•	•
Peak Demand	-	•	•	•	•	•
Multi-tariff (max 8)	•	•	•	•	•	•
<b>Multi-measurement</b>						
I1, I2, I3, In	•	•	•	•	•	•
I system	-	•	•	•	•	•
Current unbalance (Inba, Idir, linv, lhom, Inb)	-	•	•	•	•	•
Phi, cos Phi, tan Phi	•	•	•	•	•	•
<b>Power Quality</b>						
THD I1, I2, I3, In, Isys	-	•	•	•	•	•
Individual harmonics I (up to 63rd)	-	•	•	•	•	•
Crest Factor I1, I2, I3, In	-	•	•	•	•	•
K-Factor	-	•	•	•	•	•
Ground leakage current monitoring	-	-	•	•	•	•
<b>Alarms</b>						
Overcurrents	-	•	•	•	•	•
Measurement thresholds	-	•	•	•	•	•
System alarms	•	•	•	•	•	•
Protective device	•	•	-	•	-	•
<b>History</b>						
Average values		•	•	•	•	•
<b>Reference</b>	4829 0160	4829 0161	4829 0167	4829 0168	4829 0169	4829 0170

#### Accessories

Description	Reference
DIN rail mounting clip for Digiware S (QTY 10)	4829 0195

3 AC current acquisition modules

	I-30	I-31	I-35	I-43	I-45	I-60	I-61
<b>DIRIS Digiware</b>							
<b>General</b>							
Number of current inputs	3	3	3	4	4	6	6
<b>Inputs / Outputs</b>							
Digital inputs / outputs	-	-	-	2 / 2	2 / 2	-	-
<b>Metering</b>							
± kWh, ± kvarh, kVAh	•	•	•	•	•	•	•
ΣP (kW), ΣQ (kvar), ΣS (kVA), PF	•	•	•	•	•	•	•
P (kW), Q (kvar), S (kVA), PF per phase	-	•	•	•	•	-	•
Predictive Power	-	-	•	-	•	-	-
Load curves / demand profiles	-	•	•	-	•	-	•
Peak Demand	-	-	•	•	•	-	-
Multi-tariff	-	-	8	-	8	-	-
<b>Multi-measurement</b>							
I1, I2, I3, In	•	•	•	•	•	•	•
I system	-	-	•	-	•	-	-
Current unbalance (Inba, Idir, Iinv, Ihom, Inb)	-	-	•	-	•	-	-
Phi, cos Phi, tan Phi	-	-	•	-	•	-	-
<b>Power Quality</b>							
THD I1, I2, I3, In	-	•	•	•	•	-	•
Individual harmonics I (up to 63rd)	-	-	•	-	•	-	-
Crest Factor I1, I2, I3, In	-	-	•	-	•	-	-
K-Factor	-	-	•	-	•	-	-
<b>Alarms</b>							
Overcurrents	-	-	•	-	•	-	-
Measurement thresholds	-	Power / Energies	•	-	•	-	Power / Energies
System alarms	•	•	•	•	•	•	•
Protective device	• with ITR sensors	• with ITR sensors	• with ITR sensors	• with ITR sensors	• with ITR sensors	• with ITR sensors	• with ITR sensors
Logical (digital input status)	-	-	-	•	•	-	-
<b>History</b>							
Average values	-	-	•	-	•	-	-
<b>Reference</b>	4829 0110	4829 0111	4829 0130	4829 0129	4829 0131	4829 0112	4829 0113








# Selection guide

## Multi-point Power Metering & Monitoring





### DIRIS Digiware AC & DC

#### 4 RJ12 AC current sensors







Suitable for new installations  
match the pitch of protective  
devices

	Solid-core current sensors						
							
	<b>TE-18</b>	<b>TE-25</b>	<b>TE-35</b>	<b>TE-45</b>	<b>TE-55</b>	<b>TE-55</b>	<b>TE-90</b>
Nominal current In (A)	5 ... 20	25 ... 63	40 ... 160	63 ... 250	160 ... 630	400 ... 1000	600 ... 2000
Real range covered (A)	0.1 ... 24	0.5 ... 75.6	0.8 ... 192	1.26 ... 300	3.2 ... 756	8 ... 1200	12 ... 2400
Window (in/mm)	Ø 0.33 / 8.4	Ø 0.33 / 8.4	0.53 x 0.53 13.5 x 13.5	0.82 x 0.82 21 x 21	1.22 x 1.22 31 x 31	1.61 x 1.61 41 x 41	2.52 x 2.52 64 x 64
Connection	RJ12	RJ12	RJ12	RJ12	RJ12	RJ12	RJ12
Reference	4829 0500	4829 0501	4829 0502	4829 0503	4829 0504	4829 0505	4829 0506

Suitable for existing installations

	Split-core current sensors			
				
	<b>TR/iTR-10</b>	<b>TR/iTR-14</b>	<b>TR/iTR-21</b>	<b>TR/iTR-32</b>
Nominal current In (A)	25 ... 63	40 ... 160	63 ... 250	160 ... 600
Real range covered (A)	0.5 ... 75	0.8 ... 192	1.26 ... 300	3.2 ... 720
Window (in/mm)	Ø 0.39 / 10	Ø 0.55 / 14	Ø 0.83 / 21	Ø 1.26 / 32
Connection	RJ12	RJ12	RJ12	RJ12
Reference	4829 0555 / 4829 0655	4829 0556 / 4829 0656	4829 0557 / 4829 0657	4829 0558 / 4829 0658

Suitable for existing installations  
with space constraints or  
with high currents

	Flexible current sensors					
						
	<b>TF-40</b>	<b>TF-80</b>	<b>TF-120</b>	<b>TF-200</b>	<b>TF-300</b>	<b>TF-600</b>
Nominal current In (A)	100...400	150...600	400...2000	600...4000	1600...6000	1600...6000
Real range covered (A)	2...480	3...720	8...2400	12...4800	32...7200	32...7200
Window (in/mm)	Ø 1.57 / 40	Ø 3.15 / 80	Ø 4.72 / 120	Ø 7.87 / 200	Ø 11.81 / 300	Ø 23.62 / 600
Connection	RJ12	RJ12	RJ12	RJ12	RJ12	RJ12
Reference	4829 0573	4829 0574	4829 0575	4829 0576	4829 0577	4829 0578

TF sensors come with a 2m / 6.5 ft RJ12 lead which can be extended via use of female/female RJ12 connector (ref. 4829 0670).

#### 4 RJ12 cables for TE / TR / iTR / TF AC current sensors

RJ12 connection cables	Cable length (ft/m)										
	0.32/0.1	0.64/0.2	0.96/0.3	1.64/0.5	3.3/1	6.5/2	9.84/3	16.4/5	23/7	32.8/10	164/50 + 100 connectors
Number of cables	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference
1	-	-	-	-	-	-	-	4829 0602	-	4829 0603	4829 0601
3	4829 0580	4829 0581	4829 0582	4829 0595	4829 0583	4829 0584	4829 0606	4829 0607	4829 0608	4829 0609	-
4	-	-	-	4829 0596	4829 0588	4829 0589	-	-	-	-	-
6	4829 0590	4829 0591	4829 0592	4829 0597	4829 0593	4829 0594	-	-	-	-	-

#### Accessories

Description	Reference
RJ12 female/female connector (QTY 3)	4829 0670
1A / 5A CT Adaptor with RJ12 output	4829 0599





# Selection guide

## Multi-point Power Metering & Monitoring








### DIRIS Digiware AC & DC







3











#### Direct current acquisition module (DC)

DIRIS Digiware	I-30dc	I-35dc
		
<b>General</b>		
Number of RJ12 DC sensor inputs	3	3
<b>Metering</b>		
± kWh	•	•
P (± kW)	•	•
Load curves / demand profile	-	•
Peak Demand	-	•
<b>Multi-measurement</b>		
DC current (I DC)	•	•
<b>Power Quality</b>		
I ripple (current ripple)	-	•
I rms	-	•
<b>Alarms</b>		
Measurement thresholds	-	•
<b>History</b>		
Average values	-	•
<b>Reference</b>	4829 0156	4829 0157

**4** DC current sensors

	DC Solid-core current sensors						
							
Primary (A)	50	100	200	300	400	500	600
Secondary	± 4 V	± 4 V	± 4 V	± 4 V	± 4 V	± 4 V	± 4 V
Window size (in / mm)	0.80 x 0.41 20.4 x 10.4	0.80 x 0.41 20.4 x 10.4	0.80 x 0.41 20.4 x 10.4	0.80 x 0.41 20.4 x 10.4	0.80 x 0.41 20.4 x 10.4	0.80 x 0.41 20.4 x 10.4	0.80 x 0.41 20.4 x 10.4
Accuracy	≤ 1%	≤ 1%	≤ 1%	≤ 1%	≤ 1%	≤ 1%	≤ 1%
Reference	4829 0750	4829 0751	4829 0752	4829 0753	4829 0754	4829 0755	4829 0756

	DC Solid-core current sensors (continued)					
						
Primary (A)	850	1000	1500	2000	2500	5000
Secondary	± 4 V	± 4 V	± 4 V	± 4 V	± 4 V	± 4 V
Window size (in / mm)	2.52 x 0.83 64 x 21	2.52 x 0.83 64 x 21	2.52 x 0.83 64 x 21	2.52 x 0.83 64 x 21	2.52 x 0.83 64 x 21	2.52 x 0.83 64 x 21
Accuracy	≤ 1%	≤ 1%	≤ 1%	≤ 1%	≤ 1%	≤ 1%
Reference	4829 0707	4829 0708	4829 0709	4829 0710	4829 0711	4829 0712

	DC Split-core current sensors									
										
Primary (A)	50	100	200	300	400	500	800	1000	1500	2000
Secondary	± 4 V	± 4 V	± 4 V	± 4 V	± 4 V	± 4 V	± 4 V	± 4 V	± 4 V	± 4 V
Window size (in / mm)	Ø 0.83 / 21	Ø 0.83 / 21	Ø 0.83 / 21	Ø 0.83 / 21	Ø 0.83 / 21	Ø 0.83 / 21	4.09 x 1.57 104 x 40	4.09 x 1.57 104 x 40	4.09 x 1.57 104 x 40	4.09 x 1.57 104 x 40
Accuracy	≤ 1%	≤ 1%	≤ 1%	≤ 1%	≤ 1%	≤ 1%	≤ 1%	≤ 1%	≤ 1%	≤ 1%
Reference	4829 0750	4829 0751	4829 0752	4829 0753	4829 0754	4829 0755	4829 0756	4829 0757	4829 0758	4829 0759

**4** RJ12 cables for DC current sensors



RJ12 connection cables	Cable length (ft/m)				
	0.96/0.3	1.64/0.5	3.3/1	6.5/2	16.4/5
Number of cables	Reference	Reference	Reference	Reference	Reference
1	-	-	-	-	4829 0786
3	4829 0782	4829 0783	4829 0784	4829 0785	-

# Selection guide


## Multi-point Power Metering & Monitoring

### DIRIS Digiware AC & DC

#### 5 Input / output modules

	IO-10	IO-20
<i>DIRIS Digiware</i>		
<b>Inputs / outputs</b>		
Number of digital inputs/outputs	4/2	-
Number of analog inputs	-	2 / 0
<b>Alarms</b>		
Measurement thresholds	•	•
Logical (digital input status)	•	-
<b>History</b>		
Average values	-	•
Demand profiles (pulse meter)	•	-
<b>Reference</b>	4829 0140	4829 0145

#### 5 Digiware Bus cables

	Length	Reference
 Digiware Bus Cables	0.2 ft / 0.06 m	4829 0189
	0.33 ft / 0.10 m	4829 0181
	0.66 ft / 0.20 m	4829 0188
	1.64 ft / 0.06 m	4829 0182
	3.28 ft / 1 m	4829 0183
	6.56 ft / 2 m	4829 0184
	9.84 ft / 3 m	4829 0190
	16.4 ft / 5 m	4829 0186
	32.8 ft / 10 m	4829 0187
	164.04 ft / 50 m roll + 100 connectors	4829 0185

#### Additional accessories for DIRIS Digiware system

Description	Reference
6.5-ft USB Cable for configuration of DIRIS Digiware system - USB A to Micro & USB C cable	4829 0051
Spare Digiware Bus terminating resistor (already provided with DIRIS Digiware D, M and C-31)	4829 0180



When **energy** matters

# Single-point Power Metering & Monitoring

**DIRIS A & B**



#### RJ12 current sensors

The easiest, fastest way to connect current sensors thanks to a unique RJ12 concept. The mV output signal means no shorting blocks are needed!



#### Multi-protocol

RS485 or Ethernet, with Modbus RTU, Modbus TCP and BACnet IP protocols to ensure compatibility with your BMS.



#### PreciSense technology

Unrivalled class 0.5 system accuracy (including current sensors), exceeding revenue grade requirements and ensuring reliable measurements under all conditions



#### Web interface

Access real time and historical measurements remotely thanks to a free built-in web interface on all Ethernet based power meters.



#### Cyber security

Industry leading cyber security features to guarantee the confidentiality, integrity and availability of data.

# Selection Guide

## Single-point Power Metering & Monitoring

### DIRIS A & B

#### Choose your Power Meter

1



**DIRIS B-10 / B-30**  
300 VAC L-N max



**DIRIS A-40**  
300 VAC L-N max



**DIRIS A-100/A-200**  
RJ12 models  
600 VAC L-N max



**DIRIS A-100/A-200**  
333 mV models  
600 VAC L-N max

#### Choose your current sensors <sup>(1)</sup>

2



**RJ12 TE, TR/iTR, TF**  
Solid-core, split-core,  
flexible Rogowski



**RJ12 TE, TR/iTR, TF**  
Solid-core, split-core,  
flexible Rogowski



**RJ12 TE, TR/iTR, TF**  
Solid-core, split-core,  
flexible Rogowski



**TR-W & ACTL**  
333 mV split-core

1. identical current sensors required for a three-phase load

#### Choose your zero sequence CT for ground leakage monitoring

3

-

-



-

Create your project

[www.meter-selector.com](http://www.meter-selector.com)



**METER SELECTOR**  
DIGITAL TOOL AVAILABLE

# Selection guide

## Silgle point Power Metering & Monitoring

### DIRIS A & B








# 1 Single-point Power Monitoring Devices





DIRIS	B-10	B-30	A-40	A-40	A-40	A-100	A-100	A-200	A-200	
										
Current sensor technology	RJ12	RJ12	RJ12	RJ12	RJ12	RJ12	333 mV	RJ12	333 mV	
<b>General</b>										
Format	DIN Rail	DIN Rail	Door mount	Door mount	Door mount	Door mount	Door mount	Door mount	Door mount	
Number of current sensor inputs	4	4	3	3	3	4	4	4	4	
Available enclosed	-	•	-	•	-	-	-	•	-	
<b>Electrical</b>										
Power supply	110 - 240 VAC	110 - 240 VAC	110 - 277 VAC	110 - 277 VAC	110 - 277 VAC	115 - 600 VAC	115 - 600 VAC	115 - 600 VAC	115 - 600 VAC	
Voltage measurement	50 - 300 VAC L-N 87 - 520 VAC L-L	50 - 300 VAC L-N 87 - 520 VAC L-L	50 - 300 VAC L-N 87 - 520 VAC L-L	50 - 300 VAC L-N 87 - 520 VAC L-L	50 - 300 VAC L-N 87 - 520 VAC L-L	50 - 300 VAC L-N 87 - 520 VAC L-L	50 - 600 VAC L-N 90 - 690 VAC L-L	50 - 600 VAC L-N 90 - 690 VAC L-L	50 - 600 VAC L-N 90 - 690 VAC L-L	50 - 600 VAC L-N 90 - 690 VAC L-L
<b>Communication</b>										
RS485 Modbus RTU	•	•	•	•	•	•	•	•	•	
Ethernet (Modbus TCP, BACnet IP)	-	-	-	•	-	-	-	•	•	
Profibus DPV1	-	-	-	-	•	-	-	-	-	
WEBVIEW web interface	-	-	-	•	-	-	-	•	•	
Digital Input / Output	2 / o	2 / o	3 / 2	3 / 2	3 / 2	3 / 1	3 / 1	3 / 1	3 / 1	
Analog Input / Output	o / o	o / o	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
<b>Energy metering</b>										
± kWh, ± kvarh, kVAh	•	•	•	•	•	•	•	•	•	
ΣP (kW), ΣQ (kvar), ΣS (kVA), PF	•	•	•	•	•	•	•	•	•	
P (kW), Q (kvar), S (kVA), PF per phase	-	•	•	•	•	•	•	•	•	
Predictive Power	-	•	•	•	•	•	•	•	•	
Load curves / demand profiles	-	•	•	•	•	•	•	•	•	
Peak Demand	-	•	•	•	•	•	•	•	•	
Multi-tariff	8	8	8	8	8	4 (with Time of Use)	4 (with Time of Use)	4 (with Time of Use)	4 (with Time of Use)	
<b>Multi-measurement</b>										
U12, U23, U31, V1, V2, V3, f	•	•	•	•	•	•	•	•	•	
U system, V system	•	•	•	•	•	•	•	•	•	
I1, I2, I3, In, I system	•	•	•	•	•	•	•	•	•	
Unbalance U, V, I	•	•	•	•	•	•	•	•	•	
Phi, cos Phi, tan Phi	•	•	•	•	•	•	•	•	•	
<b>Power Quality</b>										
THD U, V, I	•	•	•	•	•	•	•	•	•	
Individual Harmonics U, V, I (up to 63rd)	-	•	•	•	•	-	-	•	•	
Ground Leakage Monitoring	-	-	-	-	-	-	-	-	-	
Crest Factor I1, I2, I3	-	•	•	•	•	•	•	•	•	
K-Factor	-	•	•	•	•	•	•	•	•	
PQ Events (sags, swells, interruptions, overcurrents)	-	•	•	•	•	•	•	•	•	
Waveform capture	-	-	-	-	-	-	-	•	•	
<b>Alarms</b>										
Measurement thresholds	-	•	•	•	•	•	•	•	•	
System alarms	•	•	•	•	•	•	•	•	•	
Protective device	•	•	•	•	•	•	•	•	•	
Logical (digital input status)	-	•	•	•	•	•	•	•	•	
<b>History</b>										
Average values	-	•	•	•	•	•	•	•	•	
Reference	4829 0010	4829 0000	4825 0500	4825 0501	4825 0502	4825 0600	4825 0601	4825 0604	4825 0605	







## Accessories

Description	Reference
6.5-ft USB Cable for configuration of DIRIS power meters - Type A to Micro & USB C cable	4829 0051
DIN-rail mounting accessory for DIRIS A-40 and A-100 / A-200	4825 0690

## 2 RJ12 AC current sensors

	Solid-core current sensors						
							
	<b>TE-18</b>	<b>TE-25</b>	<b>TE-35</b>	<b>TE-45</b>	<b>TE-55</b>	<b>TE-90</b>	<b>TE-90</b>
Suitable for new installations match the pitch of protective devices							
Nominal current $I_n$ (A) $\leftarrow 5 \dots 2000 \rightarrow$	5 ... 20	25 ... 63	40 ... 160	63 ... 250	160 ... 630	400 ... 1000	600 ... 2000
Real range covered (A) $\leftarrow 0.1 \dots 2400 \rightarrow$	0.1 ... 24	0.5 ... 75.6	0.8 ... 192	1.26 ... 300	3.2 ... 756	8 ... 1200	12 ... 2400
Window (in / mm)	Ø 0.33 / 8.4	Ø 0.33 / 8.4	0.53 x 0.53 21 x 21	0.82 x 0.82 13.5 x 13.5	1.22 x 1.22 31 x 31	1.61 x 1.61 41 x 41	2.52 x 2.52 64 x 64
Connection	RJ12	RJ12	RJ12	RJ12	RJ12	RJ12	RJ12
Reference	4829 0500	4829 0501	4829 0502	4829 0503	4829 0504	4829 0505	4829 0506

	Split-core current sensors			
				
	<b>TR/iTR-10</b>	<b>TR/iTR-14</b>	<b>TR/iTR-21</b>	<b>TR/iTR-32</b>
Suitable for existing installations				
Nominal current $I_n$ (A) $\leftarrow 25 \dots 600 \rightarrow$	25 ... 63	40 ... 160	63 ... 250	160 ... 600
Real range covered (A) $\leftarrow 0.5 \dots 720 \rightarrow$	0.5 ... 75	0.8 ... 192	1.26 ... 200	3.2 ... 720
Window (in / mm)	Ø 0.39 / 10	Ø 0.55 / 14	Ø 0.83 / 21	Ø 1.26 / 32
Connection	RJ12	RJ12	RJ12	RJ12
Reference	4829 0555 / 4829 0655	4829 0556 / 4829 0656	4829 0557 / 4829 0657	4829 0558 / 4829 0658

	Flexible Rogowski current sensors					
						
	<b>TF-40</b>	<b>TF-80</b>	<b>TF-120</b>	<b>TF-200</b>	<b>TF-300</b>	<b>TF-600</b>
Suitable for existing installations with space constraints or with high currents						
Nominal current $I_n$ (A) $\leftarrow 100 \dots 6000 \rightarrow$	100...400	150...600	400...2000	600...4000	1600...6000	1600...6000
Real range covered (A) $\leftarrow 2 \dots 7200 \rightarrow$	2...480	3...720	8...2400	12...4800	32...7200	32...7200
Window (in / mm)	Ø 1.57 / 40	Ø 3.15 / 80	Ø 4.72 / 120	Ø 7.87 / 200	Ø 11.81 / 300	Ø 23.62 / 600
Connection	RJ12	RJ12	RJ12	RJ12	RJ12	RJ12
Reference	4829 0573	4829 0574	4829 0575	4829 0576	4829 0577	4829 0578

TF sensors come with a 2m / 6.5 ft RJ12 lead which can be extended via use of female/female RJ12 connector (ref. 4829 0670).

# Selection guide

## Silgle point Power Metering & Monitoring

### DIRIS A & B

## 2 RJ12 cables for TE / TR / iTR / TF AC current sensors

RJ12 connection cables	Cable length (ft/m)										
	0.32/0.1	0.64/0.2	0.96/0.3	1.64/0.5	3.3/1	6.5/2	9.84/3	16.4/5	23/7	32.8/10	164/50 + 100 connectors
Number of cables	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference
1	-	-	-	-	-	-	-	4829 0602	-	4829 0603	4829 0601
3	4829 0580	4829 0581	4829 0582	4829 0595	4829 0583	4829 0584	4829 0606	4829 0607	4829 0608	4829 0609	-
4	-	-	-	4829 0596	4829 0588	4829 0589	-	-	-	-	-
6	4829 0590	4829 0591	4829 0592	4829 0597	4829 0593	4829 0594	-	-	-	-	-

## Accessories

Description	Reference
RJ12 female/female connector (QTY 3)	4829 0670
1A / 5A CT Adaptor with RJ12 output	4829 0599






## 2 ACTL 333 mV split-core current sensors

Ideal for retrofit applications - high accuracy	Split-core 333 mV current sensors									
	ACTL-0750						ACTL-1250			
Primary (A)	20	50	100	150	200	250	250	400	600	
Secondary	333 mV	333 mV	333 mV	333 mV	333 mV	333 mV	333 mV	333 mV	333 mV	333 mV
Lead length (ft / m)	8 / 2.4	8 / 2.4	8 / 2.4	8 / 2.4	8 / 2.4	8 / 2.4	8 / 2.4	8 / 2.4	8 / 2.4	8 / 2.4
Window size (in / mm)	Ø 0.78 / 20	Ø 0.78 / 20	Ø 0.78 / 20	Ø 0.78 / 20	Ø 0.78 / 20	Ø 0.78 / 20	Ø 1.77 / 45	Ø 1.77 / 45	Ø 1.77 / 45	
Reference	0.75% accuracy	USACTL0750020	USACTL0750050	USACTL0750100	USACTL0750150	USACTL0750200	USACTL0750250	USACTL1250250	USACTL1250400	USACTL1250600
	0.5% accuracy	USACTL075020C06	USACTL075005C06	USACTL075010C06	USACTL075015C06	USACTL075020C06	USACTL075025C06	USACTL125025C06	USACTL125040C06	USACTL125060C06
	0.2% accuracy	-	-	-	-	-	USACTL075025C02	USACTL125025C02	USACTL125040C02	USACTL125060C02

## 2 TR-W 333 mV split-core current sensors




Ideal for retrofit applications - compact space	Split-core 333 mV current sensors			
	TR-10W	TR-14W	TR-21W	TR-32W
Primary (A)	63	160	250	600
Secondary	333 mV	333 mV	333 mV	333 mV
Lead length (ft / m)	22 / 7	22 / 7	22 / 7	22 / 7
Window size (in / mm)	Ø 0.39 / 10	Ø 0.55 / 14	Ø 0.83 / 21	Ø 1.26 / 32
Reference	194S 5010	194S 5014	194S 5021	194S 5032

**3 RJ12 ΔIC Solid-core zero-sequence current transformers**

Ideal for new installations								
	ΔIC Ø 8	ΔIC Ø 15	ΔIC Ø 30	ΔIC Ø 50	ΔIC Ø 80	ΔIC Ø 120	ΔIC Ø 200	ΔIC Ø 300
Secondary connection	RJ12	RJ12	RJ12	RJ12	RJ12	RJ12	RJ12	RJ12
Window size (in / mm)	Ø 0.35 / 9	Ø 0.59 / 15	Ø 1.18 / 30	Ø 1.97 / 50	Ø 3.15 / 80	Ø 4.72 / 120	Ø 7.87 / 200	Ø 11.8 / 300
Measurement range	3 mA - 3A	3 mA - 3A	3 mA - 3A	3 mA - 3A	3 mA - 3A	3 mA - 3A	3 mA - 3A	3 mA - 3A
Accuracy	1%	3%	3%	3%	3%	3%	3%	3%
Voltage rating	600 Vac	720 Vac	720 Vac	720 Vac	720 Vac	720 Vac	720 Vac	720 Vac
Reference	4829 0520	4950 6015	4950 6030	4950 6050	4950 6080	4950 6120	4950 6200	4950 6300

Each ΔIC Ø 15-300 zero-sequence CT requires a T-10 RJ12 adaptor (ref. 4829 0620) to connect to the DIRIS A-200.

**3 RJ12 ΔIP-R Split-core zero-sequence current transformers**

			
	ΔIP Ø 50R	ΔIP Ø 80R	ΔIP Ø 120R
Secondary connection	RJ12	RJ12	RJ12
Window size (in / mm)	Ø 1.97 / 50	Ø 3.15 / 80	Ø 4.72 / 120
Measurement range	3 mA - 3A	3 mA - 3A	3 mA - 3A
Accuracy	3%	3%	3%
Voltage rating	720 Vac	720 Vac	720 Vac
Reference	4750 6051	4750 6081	4750 6121

Each ΔIP-R zero-sequence CT requires a T-10 RJ12 adaptor (ref. 4829 0620) to connect to the DIRIS A-200.

**3 RJ12 cables for ΔIC and ΔIP-R zero-sequence current transformers**

RJ12 connection cables	Cable length (ft / m)										164/50 + 100 connectors
	0.32/0.1	0.64/0.2	0.96/0.3	1.64/0.5	3.3/1	6.5/2	9.84/3	16.4/5	23/7	32.8/10	
Number of cables	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference
1	-	-	-	-	-	-	-	4829 0602	-	4829 0603	4829 0601
3	4829 0580	4829 0581	4829 0582	4829 0595	4829 0583	4829 0584	4829 0606	4829 0607	4829 0608	4829 0609	-
4	-	-	-	4829 0596	4829 0588	4829 0589	-	-	-	-	-
6	4829 0590	4829 0591	4829 0592	4829 0597	4829 0593	4829 0594	-	-	-	-	-

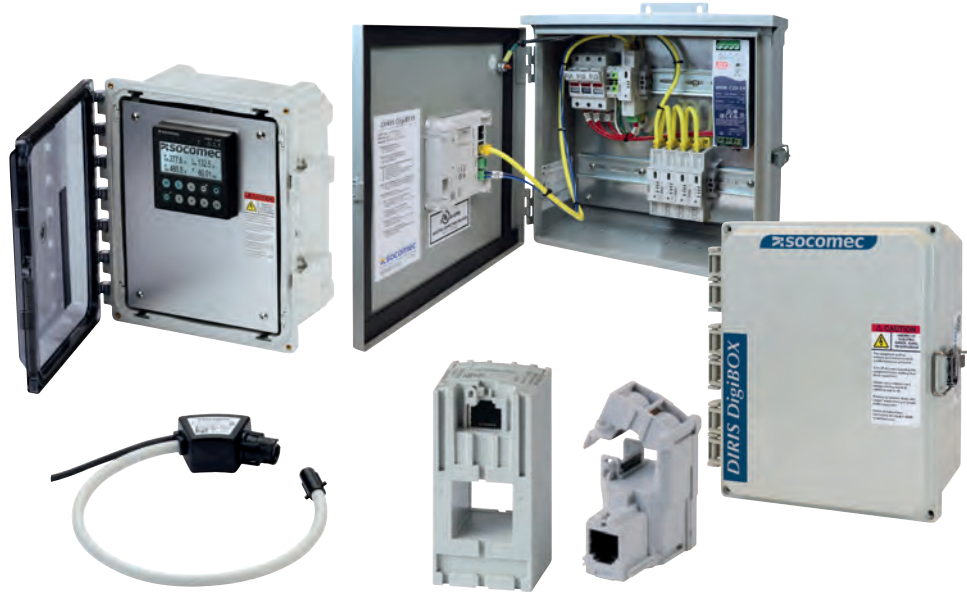
**Accessories**

Description	Reference
T-10 RJ12 adaptor (necessary to connect to DIRIS A-200 power meter)	4829 0620
DIN Rail mounting accessory <sup>(1)</sup>	4950 0031
Mounting Bracket Ø30; Ø50; Ø80/120; Ø200; Ø300	4950 0001; 4950 0002; 4950 0003; 4950 0004; 4950 0005

(1) The DIN Rail mounting accessory is supplied with ΔIP-R, but not with ΔIC zero-sequence current transformers.

# Enclosed Power Metering & Monitoring

## *DIRIS DigiBOX A, B & M*



### Safe & Reliable

Factory pre-wired internally with fused voltage connections, assembled at our UL 508A panel shop.



### PreciSense technology

Unrivaled class 0.5 system accuracy (including current sensors), exceeding revenue grade requirements and ensuring reliable measurements under all conditions.



### RJ12 current sensors

The easiest, fastest way to connect current sensors thanks to a unique RJ12 concept. The mV output signal means no shorting blocks are needed!



### Multi-protocol

RS485 or Ethernet, with Modbus RTU, Modbus TCP and BACnet IP protocols to ensure compatibility with your BMS.



### Web interface

Access real time and historical measurements remotely thanks to a free built-in web interface on all Ethernet based power meters

# Selection Guide

## Enclosed Power Metering & Monitoring

### DIRIS DigiBOX A, B & M

#### Choose your Enclosed Power Meter

1



**DIRIS DigiBOX A**  
Single-point



**DIRIS DigiBOX B**  
Single-point



**DIRIS DigiBOX M**  
Multi-circuit, up to 24 sensor inputs

#### Choose your current sensors<sup>(1)</sup> and RJ12 connection cables

2



**TE, TR/iTR, TF**

Solid-core, split-core, flexible Rogowski



1. identical current sensors required for a three-phase load

Create your project

[www.meter-selector.com](http://www.meter-selector.com)



**METER SELECTOR**  
DIGITAL TOOL AVAILABLE






# Selection guide

## Enclosed Power Metering & Monitoring

### DIRIS DigiBOX A, B & M

1

## Enclosed Power Meter

	DigiBOX B & A			DigiBOX M4		DigiBOX M8		DigiBOX M4 PRO		DigiBOX M8 PRO	
											
Metering technology	DIRIS B-30	DIRIS A-40	DIRIS A-200	DIRIS Digiware system		DIRIS Digiware system		DIRIS Digiware system		DIRIS Digiware system	
# of metering points (3P)	1	1	1	4		8		4		8	
# of current inputs	4	3	4	12		24		12		24	
Display	-	•	•	-	•	-	•	-	•	-	•
WEBVIEW web interface	-	•	•	-	-	-	-	-	•	-	•
<b>Communication</b>											
RS485 <sup>(1)</sup>	•	•	•	•	•	•	•	•	•	•	•
Ethernet <sup>(2)</sup>	-	•	•	-	•	-	•	-	•	-	•
<b>Enclosure</b>											
Type	Polycarbonate	Polycarbonate	Polycarbonate	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel
Rating	NEMA 4X	NEMA 4X	NEMA 4X	NEMA 12/3R	NEMA 12/3R	NEMA 12/3R	NEMA 12/3R	NEMA 12/3R	NEMA 12/3R	NEMA 12/3R	NEMA 12/3R
Dimensions (H x W x D)	12 x 10 x 6 in	12 x 10 x 6 in	12 x 10 x 6 in	12 x 12 x 6 in	12 x 12 x 6 in	12 x 12 x 6 in	12 x 12 x 6 in	12 x 12 x 6 in	12 x 12 x 6 in	12 x 12 x 6 in	12 x 12 x 6 in
<b>Electrical Characteristics</b>											
Voltage input	110-240 VAC	110-277 VAC	110-600 VAC	200-480 VAC	200-480 VAC	200-480 VAC	200-480 VAC	200-480 VAC	200-480 VAC	200-480 VAC	200-480 VAC
<b>Energy metering</b>											
± kWh, ± kvarh, kVAh	•	•	•	•	•	•	•	•	•	•	•
ΣP (kW), ΣQ (kvar), ΣS (kVA), PF	•	•	•	•	•	•	•	•	•	•	•
P (kW), Q (kvar), S (kVA), PF per phase	•	•	•	•	•	•	•	•	•	•	•
<b>Multi-measurement</b>											
Amps, Volts, Frequency	•	•	•	•	•	•	•	•	•	•	•
Unbalance U, V, I	•	•	•	-	-	-	-	•	•	•	•
<b>Power Quality</b>											
THD U, V, I	•	•	•	-	-	-	-	•	•	•	•
Individual Harmonics V, U, I (up to 63rd)	•	•	•	-	-	-	-	•	•	•	•
PQ Events (sags, swells, interruptions and overcurrents)	•	•	•	-	-	-	-	•	•	•	•
Waveform capture	-	-	•	-	-	-	-	-	-	-	-
<b>Alarms</b>											
Measurement thresholds	•	•	•	Power / Energies	Power / Energies	Power / Energies	Power / Energies	•	•	•	•
System alarms	•	•	•	•	•	•	•	•	•	•	•
Email notifications	-	•	•	-	-	-	-	-	•	-	•
<b>Reference</b>	USDBBB30ND0	USDBPA40ET	USDBPA200RJ	USDBB04ND0	USDBB04D50	USDBB08ND0	USDBB08D50	USDBP04ND0	USDBP04D70	USDBP08ND0	USDBP08D70

1. Supported RS485 protocol: Modbus RTU.








2. Supported Ethernet protocols: ModbusTCP/IP, BACnet IP

## Accessories





Description	Reference
6.5-ft USB Cable for configuration of DIRIS power meters - USB A to Micro & USB C cable	4829 0051

2 RJ12 AC current sensors







Suitable for new installations match the pitch of protective devices

	Solid-core current sensors						
							
	TE-18	TE-25	TE-35	TE-45	TE-55	TE-90	TE-90
Nominal current $I_n$ (A) $\leftarrow 5 \dots 2000 \rightarrow$	5 ... 20	25 ... 63	40 ... 160	63 ... 250	160 ... 630	400 ... 1000	600 ... 2000
Real range covered (A) $\leftarrow 0.1 \dots 2400 \rightarrow$	0.1 ... 24	0.5 ... 75.6	0.8 ... 192	1.26 ... 300	3.2 ... 756	8 ... 1200	12 ... 2400
Window (in / mm)	$\varnothing$ 0.33 / 8.4	$\varnothing$ 0.33 / 8.4	0.53 x 0.53 / 21 x 21	0.82 x 0.82 / 13.5 x 13.5	1.22 x 1.22 / 31 x 31	1.61 x 1.61 / 41 x 41	2.52 x 2.52 / 64 x 64
Connection	RJ12	RJ12	RJ12	RJ12	RJ12	RJ12	RJ12
Reference	4829 0500	4829 0501	4829 0502	4829 0503	4829 0504	4829 0505	4829 0506

Suitable for existing installations

	Split-core current sensors			
				
	TR/iTR-10	TR/iTR-14	TR/iTR-21	TR/iTR-32
Nominal current $I_n$ (A) $\leftarrow 25 \dots 600 \rightarrow$	25 ... 63	40 ... 160	63 ... 250	160 ... 600
Real range covered (A) $\leftarrow 0.5 \dots 720 \rightarrow$	0.5 ... 75	0.8 ... 192	1.26 ... 300	3.2 ... 720
Window (in / mm)	$\varnothing$ 0.39 / 10	$\varnothing$ 0.55 / 14	$\varnothing$ 0.83 / 21	$\varnothing$ 1.26 / 32
Connection	RJ12	RJ12	RJ12	RJ12
Reference	4829 0555 / 4829 0655	4829 0556 / 4829 0656	4829 0557 / 4829 0657	4829 0558 / 4829 0658

Suitable for existing installations with space constraints or with high currents

	Flexible current sensors					
						
	TF-40	TF-80	TF-120	TF-200	TF-300	TF-600
Nominal current $I_n$ (A) $\leftarrow 100 \dots 6000 \rightarrow$	100...400	150...600	400...2000	600...4000	1600...6000	1600...6000
Real range covered (A) $\leftarrow 2 \dots 7200 \rightarrow$	2...480	3...720	8...2400	12...4800	32...7200	32...7200
Window (in / mm)	$\varnothing$ 1.57 / 40	$\varnothing$ 3.15 / 80	$\varnothing$ 4.72 / 120	$\varnothing$ 7.87 / 200	$\varnothing$ 11.81 / 300	$\varnothing$ 23.62 / 600
Connection	RJ12	RJ12	RJ12	RJ12	RJ12	RJ12
Reference	4829 0573	4829 0574	4829 0575	4829 0576	4829 0577	4829 0578

TF sensors come with a 2m / 6.5 ft RJ12 lead which can be extended via use of female/female RJ12 connector (ref. 4829 0670).

2 RJ12 cables for TE / TR / iTR / TF AC current sensors

RJ12 connection cables	Cable length (ft/m)										
	0.32/0.1	0.64/0.2	0.96/0.3	1.64/0.5	3.3/1	6.5/2	9.84/3	16.4/5	23/7	32.8/10	164/50 + 100 connectors
Number of cables	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference
1	-	-	-	-	-	-	-	4829 0602	-	4829 0603	4829 0601
3	4829 0580	4829 0581	4829 0582	4829 0595	4829 0583	4829 0584	4829 0606	4829 0607	4829 0608	4829 0609	-
4	-	-	-	4829 0596	4829 0588	4829 0589	-	-	-	-	-
6	4829 0590	4829 0591	4829 0592	4829 0597	4829 0593	4829 0594	-	-	-	-	-

# Enclosed multi-point sub-metering

## DIRIS MCM



### Multi-circuit

Up to (16) three-phase meters in one small physical footprint, with (48) independent current sensor inputs.



### Safe

No circuitry or live parts accessible on the meter, allowing to safely operate it even with cover removed and voltage applied.



### Optional wireless interface

Multi-drop Ethernet runs can be replaced with a secure local wireless network, significantly reducing installation and wiring costs.



### mV current sensors

Split-core and Rogowski current sensors are mV based and can be connected safely under load, even with meter cover removed and voltage applied.



### CT correct algorithm

Cutting-edge algorithm detects potential wiring or configuration errors and proposes the adequate software changes.

# Selection Guide

## Enclosed multi-point sub-metering

### DIRIS MCM

Choose your sub-meter and optional wireless interfaces

1



**DIRIS MCM-16**  
Power meter, 16 CT inputs



**DIRIS MCM-48**  
Power meter, 48 CT inputs



**RF END-Node**  
Wireless transmitter



**RF HUB-Node**  
Wireless receiver

Choose your current sensors

2



**TR-W**  
333 mV, compact



**ACCU-CT SENSORS**  
333 mV, high accuracy










**ROG**  
131 mV @1 kA, 2 wires

# Selection guide

## Enclosed multi-point sub-meter



### DIRIS MCM

#### 1 Enclosed multi-point sub-meter










							
<b>DIRIS MCM</b>	<b>MCM-16-N-N</b>	<b>MCM-16-D-N</b>	<b>MCM-16-D-D</b>	<b>MCM-48-N-N</b>	<b>MCM-48-N-D</b>	<b>MCM-48-D-N</b>	<b>MCM-48-D-D</b>
<b>General</b>							
Number of current sensor	16	16	16	48	48	48	48
Type of current sensors	333 mV 131 mV Rogowski	333 mV 131 mV Rogowski	333 mV 131 mV Rogowski	333 mV 131 mV Rogowski	333 mV 131 mV Rogowski	333 mV 131 mV Rogowski	333 mV 131 mV Rogowski
Disconnect Switch			•		•		•
Display		•	•			•	•
<b>Communication</b>							
RS485	Modbus RTU	Modbus RTU	Modbus RTU	Modbus RTU	Modbus RTU	Modbus RTU	Modbus RTU
Ethernet	Modbus TCP BACnet IP	Modbus TCP BACnet IP	Modbus TCP BACnet IP	Modbus TCP BACnet IP	Modbus TCP BACnet IP	Modbus TCP BACnet IP	Modbus TCP BACnet IP
Wireless	o	o	o	o	o	o	o
<b>Electrical</b>							
Number of voltage inputs	2	2	2	2	2	2	2
<b>Energy metering</b>							
±kWh, ±kvarh, kVAh	•	•	•	•	•	•	•
ΣP (kW), ΣQ (kvar), ΣS	•	•	•	•	•	•	•
P (kW), Q (kvar), S (kVA), PF per phase	•	•	•	•	•	•	•
Demand & Peak Demand	•	•	•	•	•	•	•
<b>Multi - measurement</b>							
U12, U23, U31, V1, V2,	•	•	•	•	•	•	•
U system, V system	•	•	•	•	•	•	•
I1, I2, I3, In	•	•	•	•	•	•	•
I system	•	•	•	•	•	•	•
<b>Power quality</b>							
THD U, V, I	•	•	•	•	•	•	•
Reference	4827 16NN	4827 16DN	4827 16DD	4827 0548	4827 0549	4827 48DN	4827 48DD

o - Wireless RF System optional





#### 1 Wireless interfaces

	<b>RF END-Node</b>	<b>RF HUB-Node</b>
<b>RF wireless system</b>		
<b>Communication</b>		
RS485	Input Max. (16) Modbus slave devices	Output
Ethernet	-	Output
Wireless	Transmitter	Receiver Max. (8) RF END-Node per HUB-Node
Reference	4899 0800	4899 0801





2 ACTL 333 mV split-core current sensors

		Split-core 333 mV current sensors								
Ideal for retrofit applications - high accuracy										
		ACTL-0750					ACTL-1250			
Primary (A)		20	50	100	150	200	250	250	400	600
Secondary		333 mV	333 mV	333 mV	333 mV	333 mV	333 mV	333 mV	333 mV	333 mV
Lead length (ft / m)		8 / 2.4	8 / 2.4	8 / 2.4	8 / 2.4	8 / 2.4	8 / 2.4	8 / 2.4	8 / 2.4	8 / 2.4
Window size (in / mm)		Ø 0.78 / 20	Ø 0.78 / 20	Ø 0.78 / 20	Ø 0.78 / 20	Ø 0.78 / 20	Ø 0.78 / 20	Ø 1.77 / 45	Ø 1.77 / 45	Ø 1.77 / 45
Reference	0.75% accuracy	USACTL0750020	USACTL0750050	USACTL0750100	USACTL0750150	USACTL0750200	USACTL0750250	USACTL1250250	USACTL1250400	USACTL1250600
	0.5% accuracy	USACTL0750020C06	USACTL0750050C06	USACTL0750100C06	USACTL0750150C06	USACTL0750200C06	USACTL0750250C06	USACTL1250250C06	USACTL1250400C06	USACTL1250600C06
	0.2% accuracy	-	-	-	-	-	USACTL0750250C02	USACTL1250250C02	USACTL1250400C02	USACTL1250600C02

2 TR-W 333 mV split-core current sensors

		Split-core 333 mV current sensors			
Ideal for retrofit applications - compact space					
		TR-10W	TR-14W	TR-21W	TR-32W
Primary (A)		63	160	250	600
Secondary		333 mV	333 mV	333 mV	333 mV
Lead length (ft / m)		22 / 7	22 / 7	22 / 7	22 / 7
Window size (in / mm)		Ø 0.39 / 10	Ø 0.55 / 14	Ø 0.83 / 21	Ø 1.26 / 32
Accuracy		0.5%	0.5%	0.5%	0.5%
Reference		194S 5010	194S 5014	194S 5021	194S 5032

2 Rogowski 131 mV current sensors (only compatible with DIRIS MCM power meter)

		Rogowski 131 mV current sensors			
Ideal for busbars or higher currents					
		ROG-80	ROG-120	ROG-200	ROG-300
Output signal		131 mV / kA @ 60Hz	131 mV / kA @ 60Hz	131 mV / kA @ 60Hz	131 mV / kA @ 60Hz
Lead length (ft / m)		22 / 7	22 / 7	22 / 7	22 / 7
Window size (in / mm)		Ø 3.15 / 80	Ø 4.7 / 120	Ø 7.8 / 200	Ø 11.8 / 300
Accuracy		0.5%	0.5%	0.5%	0.5%
Reference		194S 1080	194S 1120	194S 1200	194S 1300







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