



DIRIS DigiBOX

Enclosed single & multi-point metering solution



When **energy** matters



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DIRIS DigiBOX

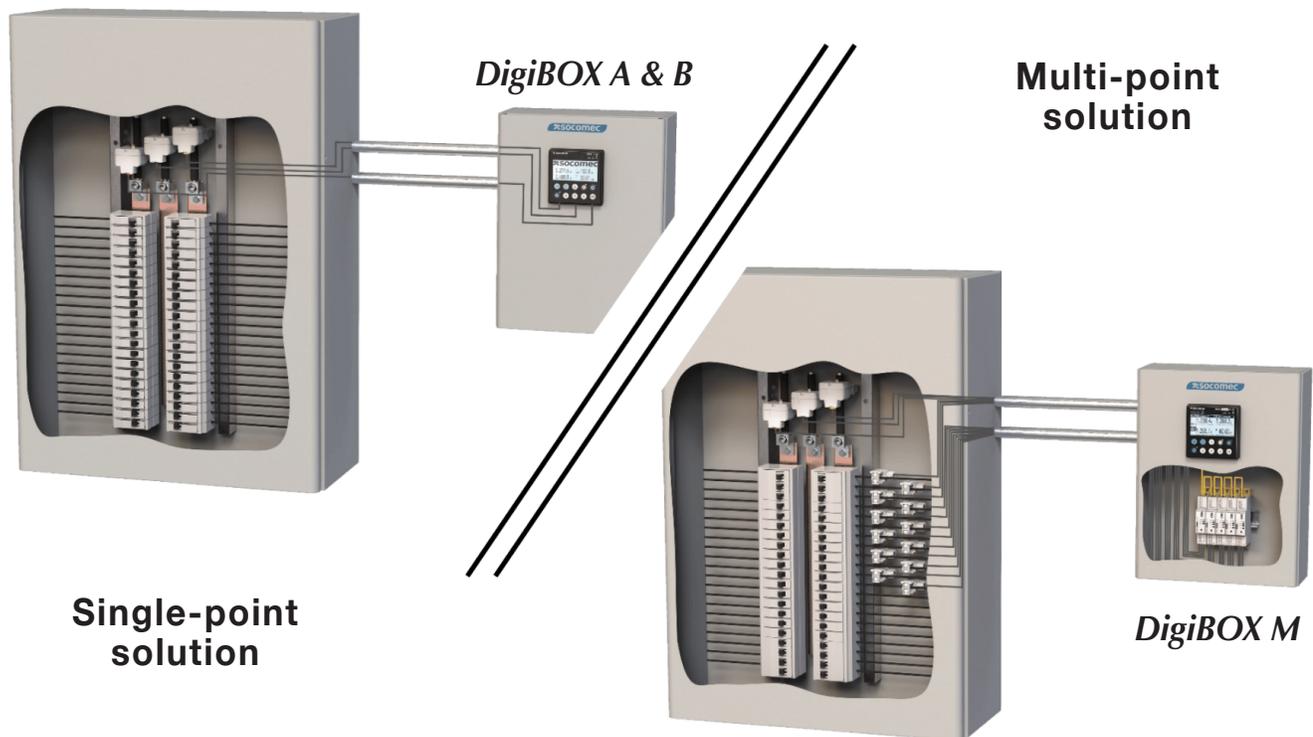
Flexible and scalable enclosed solution for retrofit submetering applications

Socomec DIRIS DigiBOX is an enclosed, factory pre-wired submetering solution addressing a wide range of metering applications.

The single-point DIRIS DigiBOX A & B submeters allow the monitoring of a main feed or one dedicated circuit, while the DIRIS DigiBOX M uses a unique modular concept to monitor multiple circuits of any type (single-phase, three-phase, etc.) simultaneously.

Complete your metering system by selecting suitable current sensors for your application.

The Socomec RJ12 current sensors allow a quick and error-free installation, offering considerable cost savings and reduced customer site downtime.



Embedded WEBVIEW webservice

Our DigiBOX A-40 Ethernet and DigiBOX M PRO solutions include a free webservice for the remote visualization of measurements and consumption.

- User friendly interface with no configuration requirement
- Real time and historical visualization
- 1 year of data storage with 1-hour reading interval
- Breakdown of consumption by usage, individual load and location



Key benefits



Compact design

- Up to 6 times more compact compared with traditional submetering approach (multi-meter cabinets or individual sub meters)



Flexible

- Customizable to your requirements (number of metering points communication, display, functionality, etc.)
- Unique scalable design allowing to add metering points without any tools.



Plug & play

- Factory pre-wired internally.
- Color-coded RJ12 cables for easy phase identification when wiring current sensors to the DigiBOX.
- Automatic detection of current sensor type and rating.
- Using low-voltage mV current sensors, no shorting blocks are needed, they can be disconnected safely under load.



Simple to order

- One part number per DIRIS DigiBOX model.
- Universal system voltage and power supply.
- In stock in USA.



Accurate

Accuracy of measurements meets ANSI C12.20 and IEC 61557-12 standards and exceed revenue grade accuracy:

- Class 0.5 system accuracy (Meter + TE/ITR/ TF current sensors) from 2% to 120% of rated current.
- Class 0.2 DigiBOX A meter accuracy.



Safe & reliable

- Durable NEMA 3R/4X enclosures.
- cULus listed enclosures and components.
- Assembled at our cULus 508A facility.
- Fused voltage connections.
- Detailed installation and commissioning instruction guides.

DigiBOX selection guide

	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							
Number of metering points (3P)	1	1	1	4		8		4		8	
Number of current inputs	4	3	4	12		24		12		24	
Display		•	•		•		•		•		•
WEBVIEW webserver		•	•						•		•
Communication											
RS485 (*)	•	•	•	•	•	•	•	•	•	•	•
Ethernet (**)		•	•		•		•		•		•
Enclosure											
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						
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
Electrical characteristics											
Power supply	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
Energy metering											
kWh (+/-), kvarh (+/-), kVAh	•	•	•	•	•	•	•	•	•	•	•
kW (+/-), kvar (+/-), kVA	•	•	•	•	•	•	•	•	•	•	•
Power Factor	•	•	•	•	•	•	•	•	•	•	•
Multi-measurement											
Amps, Volts, Frequency	•	•	•	•	•	•	•	•	•	•	•
Power quality											
Voltage/current imbalance	•	•	•					•	•	•	•
THDV, THDU, THDI	•	•	•					•	•	•	•
Individual Harmonics V, U, I (up to 63rd)	•	•	•					•	•	•	•
Waveform Capture			•								
Alarms											
Measurement thresholds	•	•	•	o	o	o	o	•	•	•	•
Events (voltage sags, swells, interruptions and overcurrent)	•	•	•					•	•	•	•
Email notifications		•	•						•		•
Part Nos	USDBBB30NDO	USDBPA40ET	USDBPA200RJ	USDBBB04NDO	USDBB04D50	USDBB08NDO	USDBB08D50	USDBP04NDO	USDBP04D70	USDBP08NDO	USDBP08D70

o = only on power measurements (kW, kvar, kVA)

(*) Supported RS485 protocol: Modbus RTU

(**) Supported Ethernet protocols: Modbus TCP/IP, BACnet IP

(***) For 480 VAC service types, please consult us

Applications

Manufactured with quality, ease of use and installation, Socomec's enclosed metering solutions have been designed for multiple applications:

- Sub-metering and cost allocation.
- Demand profile analysis.
- Energy efficiency standards and energy codes compliance (ASHRAE 90.1, IECC, Title 24 etc.)
- Green building initiatives (LEED)
- Equipment monitoring
- Preventative maintenance

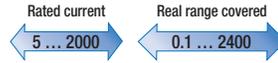


Current sensors selection guide



Quick and reliable RJ12 connection of current sensors

TE solid current sensors

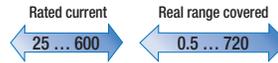


Suitable for new installations - Match the pitch of protective devices.

Model	Rated currents (A)												Real range covered (A)	Ø (in)	Reference
	5	20	25	40	63	160	250	400	600	630	1000	2000			
TE-90													12 ... 2400	2.52	4829 0506
TE-55													8 ... 1200	1.61	4829 0505
TE-45													3.2 ... 756	1.22	4829 0504
TE-35													1.26 ... 300	0.82	4829 0503
TE-25													0.8 ... 192	0.53	4829 0502
TE-18													0.5 ... 75	0.33	4829 0501
TE-18													0.1 ... 24	0.33	4829 0500



TR split-core current sensors

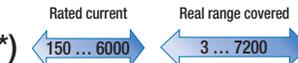


Suitable for existing installations.

Model	Rated currents (A)						Real range covered (A)	Ø (in)	Reference
	25	40	63	160	250	600			
TR/ITR-32							3.2 ... 720	1.26	4829 0558 / 4829 0658
TR/ITR-21							1.26 ... 300	0.83	4829 0557 / 4829 0657
TR/ITR-14							0.8 ... 192	0.55	4829 0556 / 4829 0656
TR/ITR-10							0.5 ... 75	0.39	4829 0555 / 4829 0655



TF Flexible (Rogowski) current sensors (*)



Suitable for existing installations with space restrictions or with high-intensity currents.

Model	Rated currents (A)							Real range covered (A)	Ø (in)	Reference
	150	400	600	1600	2000	4000	6000			
TF-600								32 ... 7200	23.62	4829 0578
TF-300								32 ... 7200	11.81	4829 0577
TF-200								12 ... 4800	7.87	4829 0576
TF-120								8 ... 2400	4.72	4829 0575
TF-80								3 ... 720	3.15	4829 0574
TF-40								3 ... 480	1.57	4829 0573



RJ12 female/female for RJ12 lead extension between DigiBOX and TF sensors

(*) TF Rogowski sensors come with a 6-ft cable lead with RJ12 male connector

RJ12 cables to connect current sensors to DigiBOX

Number of cables	Cable length (m/ft)						
	0.5 / 1.64	1 / 3.3	2 / 6.5	3 / 9.84	5 / 16.4	7 / 22.9	10 / 32.8
	Reference	Reference	Reference	Reference	Reference	Reference	Reference
1	-	-	-	-	4829 0602	-	4829 0603
3	4829 0595	4829 0583	4829 0584	4829 0606	4829 0607	4829 0608	4829 0609



Socomec: our innovations supporting your energy performance

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worldwide

10 % of sales revenue
dedicated to R&D

400 experts
dedicated to service provision

Your power management expert



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SWITCHING



POWER
MONITORING



POWER
CONVERSION



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STORAGE



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SERVICES

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- Safety of persons and assets
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- Energy management
- Energy quality
- Energy availability
- Energy storage
- Prevention and repairs
- Measurement and analysis
- Optimization
- Consultancy, commissioning and training

A worldwide presence

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- Italy (x2)
- Tunisia
- India
- China (x2)
- USA (x3)

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- Dubai (United Arab Emirates) • France • Germany
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- Poland • Portugal • Romania • Serbia • Singapore
- Slovenia • South Africa • Spain • Switzerland
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