



DIRIS DigiBOX

Revenue grade enclosed single
& multi-point metering solution



your energy
our expertise



 **socomec**
Innovative Power Solutions

DIRIS DigiBOX

Flexible enclosed solution for retrofit metering applications

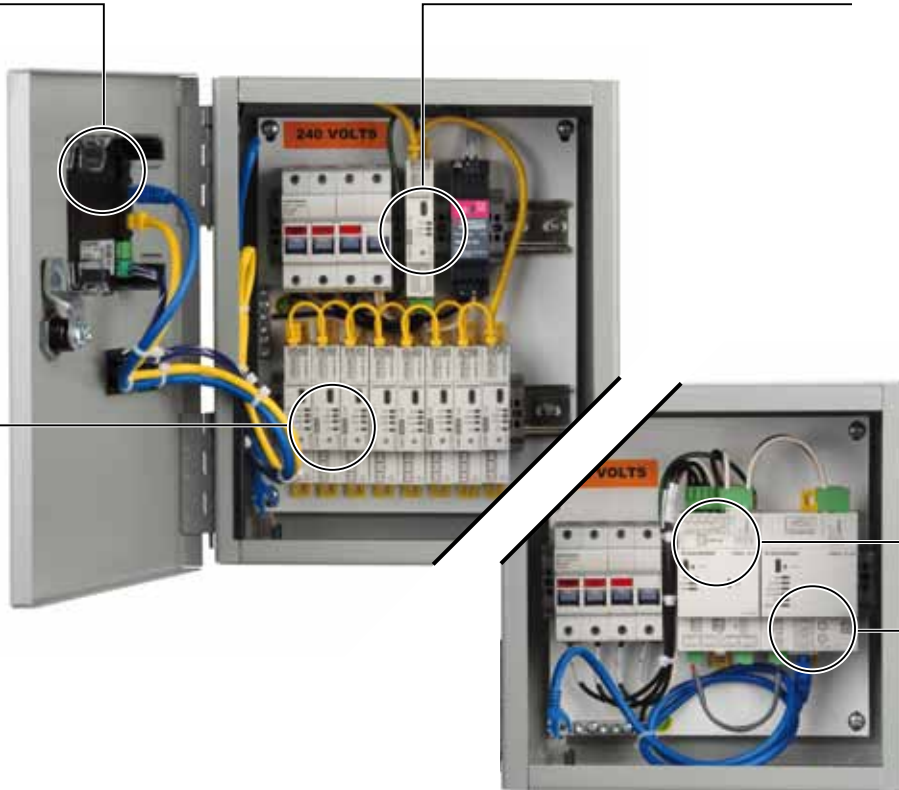
Socomec's enclosed metering line DIRIS DigiBOX is designed to offer a complete and modular metering solution in NEMA1/3R enclosures for indoor and outdoor use. With ease of installation for retrofit applications and factory pre-wired Plug & Play technology, DIRIS DigiBOX solutions provide considerable savings in installation costs.

Multi-circuit measurements solution

A single centralized control unit

A single voltage measurement module (U)

Current measurement modules (I)
+ current sensors



Multifunction power meter

Optional gateway

Single-point measurement solution

DIRIS DigiBOX displays and gateways

Any DIRIS DigiBOX solution can include a remote display or DIRIS G communication gateways with various communication protocols enabling the local visualization of measurements as well as a remote analysis of consumptions via a webserver.



DIRIS D-30/D-50 / D-70



DIRIS G-30/G-50
RS485 Modbus

Options

DIRIS DigiBOX line is ideal for existing electrical distribution equipment with limited mounting space and no metering compartment.

Socomec offers two standard solutions:

- **DIRIS DigiBOX**
 - Basic single-point measurement with DIRIS B series meters.
 - Basic multi-circuit measurements with modular, plug & play DIRIS Digiware system.
- **DIRIS DigiBOX Pro**
 - Advanced single-point measurement with DIRIS B series meters.
 - Advanced multi-circuit measurements with modular, plug & play DIRIS Digiware system.
- **DIRIS DigiBOX Flex**
 - Customized solution for special applications.



Key benefits



Flexible

- Easy to add additional metering points.
- Customizable DIRIS DigiBOX Flex for special metering needs.



Plug & play

- Factory pre-wired internally.
- RJ12 current sensor connection.
- Automatic detection of ratings and verification of current flow direction.
- Identification of cables by color-coding and wiring control by the system.
- Disconnection of the current sensor secondary under load.



Safe & reliable

- Durable NEMA 1/3R & UL rated enclosures.
- Robust electrical design.
- UL listed enclosures and components.
- UL 508A assembly facility.
- Fused voltage connections.
- Reliable detailed wiring instructions.



Simple to order

- One part number per DIRIS DigiBOX model.



Accurate

- Accuracy of measurements guaranteed according to ANSI C12.20 and IEC standard 61557-12:
- Better than Revenue Grade: class 0.5 from 2 % to 120 % of rated current for the global measurement chain (associated with TE / TF current sensors).
 - Class 0.2 for the meter alone.



Compact design

- The most compact product in the market considering number of measured points.

Selection guide

	DigiBOX				DigiBOX Pro				DigiBOX Flex	
Number of metered points	1	4	6	8	1	4	6	8	Customized solution	
Number of current inputs	4	12	18	24	4	12	18	24		
Metering Modules	DIRIS B10	DIRIS Digiware	DIRIS Digiware	DIRIS Digiware	DIRIS B30	DIRIS Digiware	DIRIS Digiware	DIRIS Digiware		
Multi-measurement										
Currents, voltages (ph/ph and ph/n), active/reactive/apparent powers, power factor, frequency	•	•	•	•	•	•	•	•		
Voltage/current unbalance	•				•	•	•	•		
Power factor, cos Phi, tan Phi	•				•	•	•	•		
Metering										
kWh(+/-), kvarh (+/-), kVAh	•	•	•	•	•	•	•	•		
Multi-tariff	•				•	•	•	•		
Load curves					•	•	•	•		
Power Quality										
THDV, THDU, THDI	•				•	•	•	•		
Individual harmonics V, U & I (up to rank 63)					•	•	•	•		
Voltage dips, cut-offs and surges (EN50160)					•	•	•	•		
Overcurrents					•	•	•	•		
Alarms					•	•	•	•		
Communication	RS485/Ethernet									
Enclosure rating	NEMA 1/3R									
Display & gateway	Optional									
Dimensions										
H x W x D (inches)	10 x 10 x 6	12 x 12 x 6	12 x 12 x 6	12 x 12 x 6	10 x 10 x 6	12 x 12 x 6	12 x 12 x 6	12 x 12 x 6		
References										
No display	USDBB01ND0	USDBB04ND0	USDBB06ND0	USDBB08ND0	USDBP01ND0	USDBP04ND0	USDBP06ND0	USDBP08ND0		
With display	USDBB01D30	USDBB04D50	USDBB06D50	USDBB08D50	USDBP01D30	USDBP04D50	USDBP06D50	USDBP08D50		
Display & gateway					USDBP01D50		USDBP06D70	USDBP08D70		
Customized metering and communication solution	Made to order - contact us									

Applications

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

- Tenant metering.
- Energy Efficiency.
- Sub-metering and cost allocation.
- Remote site metering.
- Title 24.

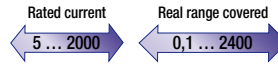


Current sensors selection guide



RJ12 cables with fail-safe mechanisms are available; refer to the relevant pages of the catalog.

TE solid current sensors



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

	TE-18	TE-25	TE-35	TE-45	TE-55	TE-90
Nominal current (A)	5 to 20	25 to 63	40 to 160	63 to 250	160 to 630	400 to 1000
Real range covered (A)	0.1 to 24	0.5 to 75	0.8 to 192	1.26 to 300	3.2 to 756	8 to 1200
Aperture (in)	Ø 0.31	Ø 0.31	0.53 x 0.53	0.83 x 0.83	1.22 x 1.22	1.61 x 1.61
Dimensions (in)	1.10x0.78x1.77	1.10x0.78x1.77	0.98x1.26x2.56	1.38x1.26x2.79	1.77x1.26x3.38	2.16x1.26x3.94
Connection	RJ12	RJ12	RJ12	RJ12	RJ12	RJ12
References	4829 0500	4829 0501	4829 0502	4829 0503	4829 0504	4829 0506

For loads greater than 1000 A, use the the 5 A/RJ12 adapter associated with 5A secondary CTs.

Staggered assembly



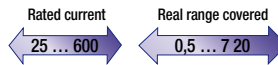
DIRIS T 005 A

Linear assembly



DIRIS T 006 A

TR split-core current sensors



Suitable for existing installations.

	TR-10	TR-16	TR-24	TR-36
Nominal current (A)	25 to 75	32 to 100	63 to 200	200 to 600
Real range covered (A)	0.5 to 90	0.64 to 120	1.26 to 200	4 to 720
Diameter (in)	Ø 0.39	Ø 0.63	Ø 0.94	Ø 1.42
Dimensions (in)	0.98x1.53x2.79	1.18x1.65x2.91	1.77x1.73x3.74	2.24x1.65x4.37
Connection	RJ12	RJ12	RJ12	RJ12
References	4829 0551	4829 0552	4829 0553	4829 0554

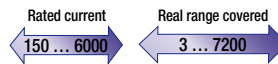
For loads greater than 600 A, use the the 5 A/RJ12 adapter associated with 5A secondary CTs.

TR Split-core current sensors



DIRIS T 012 A

TF Flexible (Rogowski) current sensors



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

	TF-55	TF-120	TF-300
Nominal current (A)	150 to 600	500 to 2000	1600 to 6000
Real range covered (A)	3 to 720	10 to 2400	32 to 7200
Diameter (in)	Ø 2.16	Ø 4.72	Ø 11.81
Connection	RJ12	RJ12	RJ12
References	4829 0570	4829 0571	4829 0572

TF Flexible current sensors



DIRIS T 029 A

Cable selection to connect sensors and meters

RJ12 connection cables	Cable length (m)								
	0.1	0.2	0.3	0.5	1	2	5	10	50 m reel + 100 connectors
Number of cables	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	-	-	-
4	-	-	-	4829 0596	4829 0588	4829 0589	-	-	-
6	4829 0590	4829 0591	4829 0592	4829 0597	4829 0593	4829 0594	-	-	-