

DIRIS B

Multifunction power monitoring devices



your energy
our expertise



 **socomec**
Innovative Power Solutions

Monitor your remote measurement points

DIRIS B meters communicate wirelessly or via RS485 Modbus and offer several communication protocols. Measurement and metering data can be displayed on a DIRIS D-30 remote screen or centralised and made available on an Ethernet network using a DIRIS-G communication gateway.

Advantages



Flexible

Multi-circuit

Ability to monitor several circuits thanks to four independent current inputs.

For example, it allows to measure or monitor:

- 1 three-phase load + 1 single-phase load,
- 4 single-phase loads.

Compact

Modular, 3 modules device.



Connected

- Wireless or cabled (RS485).
- Multi-protocol: Modbus, BACnet, PROFIBUS.
- Remote DIRIS D-30 screen for displaying measurement and metering data.
- Linked to a DIRIS G-40 or G-60 gateway for centralisation and communication of data via RF or RS485 to Ethernet.



Accurate

Accuracy of measurements

guaranteed according to IEC standard 61557-12:

- 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.



Plug & Play

Rapid & reliable connection (RJ12) of current sensors

- Automatic detection of ratings and correction of current flow direction.
- Prevents wiring errors, allows disconnection of the current sensor secondary under load.

Auto-configuration

Automatic detection of parameters:

- Network type.
- Load type.
- Device addressing.
- Current sensor ratings.



DIRIS B 010 A

DIRIS B
Radio-frequency



DIRIS D 001 A

DIRIS D-30
Remote screen

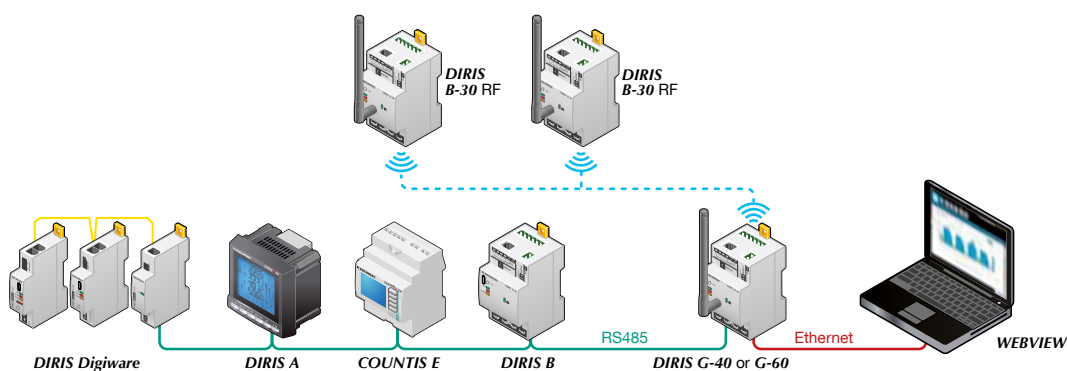


Optional module



DIRIS B

System



DIRIS-B 014 C GB

Associated current sensors *TE*, *TR* and *TF*

A rapid RJ12 connection makes wiring easy and reliable. The accuracy of the global measurement chain is guaranteed according to standard IEC 61557-12:

- class 0.5 with TE or TF current sensors,
- class 1 with TR current sensors.



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

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
Rated 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 (mm)	Ø 8.4	Ø 8.4	13.5 x 13.5	21 x 21	31 x 31	41 x 41
Dimensions (mm)	28x20x45	28x20x45	25x32.5x65	35x32.5x71	45x32.5x86	55x32.5x100
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 5 A/RJ12 adapter associated with 5A secondary CTs.

Staggered assembly



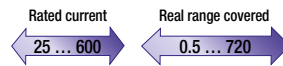
DIRIS T 008 A

Linear assembly



DIRIS T 008 A

TR Split-core current sensors



Suitable for existing installations.

	TR-10	TR-16	TR-24	TR-36
Rated 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 (mm)	Ø 10	Ø 16	Ø 24	Ø 36
Dimensions (mm)	25x39x71	30x42x74	45x44x95	57x42x111
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
Rated 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 (mm)	Ø 55	Ø 120	Ø 300
Connection	RJ12	RJ12	RJ12
References	4829 0570	4829 0571	4829 0572

TF Flexible current sensors



DIRIS T 016 A

Selection guide

	DIRIS B-10 RS485	DIRIS B-30 RS485	DIRIS B-30 RF
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		•	•
Quality analysis			
THDV, THDU, THDI	•	•	•
Individual harmonics V, U & I (up to rank 63)		•	•
Voltage dips, cut-offs and surges (EN50160)		•	•
Overcurrents		•	•
Alarms		•	•
Communication			
RS485 Modbus	•	•	
868 MHz radio-frequency			•
2 inputs (status/pulse)	•	•	•
References	4829 0010	4829 0000	4829 0002

OPTIONAL MODULES ⁽¹⁾	
2 inputs/2 outputs, digital	4829 0030
2 inputs/2 outputs, analogue, 4-20 mA	4829 0031
3 temperature inputs, PT100/PT1000	4829 0032
RS485 Modbus slave interface	4829 0033
PROFIBUS communication	4829 0034
BACnet IP communication	4829 0035
BACnet MSTP communication	4829 0036
DISPLAY	
DIRIS D-30 single-point display	4829 0200

(1) Up to 4 optional modules per meter.

Socomec worldwide

IN EUROPE

BELGIUM

Critical Power / Power Control & Safety / Energy Efficiency

Tel. +32 2 340 02 30
Fax +32 2 346 28 99
info.be@socomec.com

FRANCE

Critical Power / Power Control & Safety / Energy Efficiency

Tel. +33 1 45 14 63 00
Fax +33 1 48 67 31 12
dcm.ups.fr@socomec.com

GERMANY

Critical Power

Tel. +49 621 71 68 40
Fax +49 621 71 68 444
info.ups.de@socomec.com

Power Control & Safety / Energy Efficiency

Tel. +49 7243 65292 0
Fax +49 7243 65292 13
info.scp.de@socomec.com

ITALY

Critical Power

Tel. +39 02 98 242 942
Fax +39 02 98 240 723
info.ups.it@socomec.com

Power Control & Safety / Energy Efficiency

Tel. +39 02 98 49 821
Fax +39 02 98 24 33 10
info.scp.it@socomec.com

NETHERLANDS

Critical Power / Power Control & Safety / Energy Efficiency

Tel. +31 30 760 0900
Fax +31 30 637 2166
info.nl@socomec.com

POLAND

Critical Power

Tel. +48 22 825 73 60
Fax. +48 22 825 73 70
info.ups.pl@socomec.com

Power Control & Safety / Energy Efficiency

Tel. +48 91 442 64 11
Fax +48 91 442 64 19
info.scp.pl@socomec.com

PORTUGAL

Critical Power / Power Control & Safety / Energy Efficiency

Tel. +351 261 812 599
Fax +351 261 812 570
info.ups.pt@socomec.com

ROMANIA

Critical Power / Power Control & Safety / Energy Efficiency

Tel. +40 21 319 36 88
Fax +40 21 319 36 89
info.ro@socomec.com

SERBIA

Critical Power / Power Control & Safety / Energy Efficiency

Tel. +381 11 40 43 246
Fax +381 11 40 43 245
info.rs@socomec.com

SLOVENIA

Critical Power / Power Control & Safety / Energy Efficiency

Tel. +386 1 5807 860
Fax +386 1 561 11 73
info.si@socomec.com

SPAIN

Critical Power / Power Control & Safety / Energy Efficiency

Tel. +34 93 540 75 75
Fax +34 93 540 75 76
info.es@socomec.com

SWITZERLAND

Critical Power

Tel. +41 44 745 40 80
Fax +41 44 745 40 85
info@socomec.ch

TURKEY

Critical Power / Power Control & Safety / Energy Efficiency

Tel. +90 216 540 71 20-21-22
Fax +90 216 540 71 27
info.tr@socomec.com

UNITED KINGDOM

Critical Power

Tel. +44 1285 863 300
Fax +44 1285 862 304
info.uk@socomec.com

Power Control & Safety / Energy Efficiency

Tel. +44 1462 440 033
Fax +44 1462 431 143
info.uk@socomec.com

IN ASIA PACIFIC

AUSTRALIA

Critical Power / Power Control & Safety

Tel. +61 2 9325 3900
Fax +61 2 9888 9544
info.ups.au@socomec.com

CHINA

Critical Power / Power Control & Safety / Energy Efficiency

Tel. +86 21 52 98 95 55
Fax +86 21 62 28 34 68
info.cn@socomec.com

INDIA

Critical Power / Power Control & Safety / Energy Efficiency

Tel. +91 44 39215400
Fax +91 44 39215450 & 51
info.in@socomec.com

SINGAPORE

Critical Power / Power Control & Safety / Energy Efficiency

Tel. +65 6506 7600
Fax +65 64 58 7377
info.sg@socomec.com

THAILAND

Critical Power

Tel. +66 2 941 1644 7
Fax +66 2 941 1650
info.ups.th@socomec.com

IN MIDDLE EAST

UNITED ARAB EMIRATES

Critical Power / Power Control & Safety / Energy Efficiency

Tel. +971 4 29 98 441
Fax +971 4 29 98 449
info.ae@socomec.com

IN AMERICA

USA, CANADA & MEXICO

Power Control & Safety / Energy Efficiency

Tel. +1 617 245 0447
Fax +1 617 245 0437
info.us@socomec.com

OTHER COUNTRIES

NORTH AFRICA

Algeria / Morocco / Tunisia
info.naf@socomec.com

AFRICA

Other countries
info.africa@socomec.com

SOUTH EUROPE

Cyprus / Greece / Israel / Malta
info.se@socomec.com

SOUTH AMERICA

Tel. +34 93 540 75 75
info.es@socomec.com

MORE DETAILS

www.socomec.com/worldwide

HEAD OFFICE

SOCOMECC GROUP

SAS SOCOMECC capital 10 686 000 €
R.C.S. Strasbourg B 548 500 149
B.P. 60010 - 1, rue de Westhouse
F-67235 Benfeld Cedex - FRANCE
Tel. +33 3 88 57 41 41
Fax +33 3 88 74 08 00
info.scp.isd@socomec.com

www.socomec.com

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