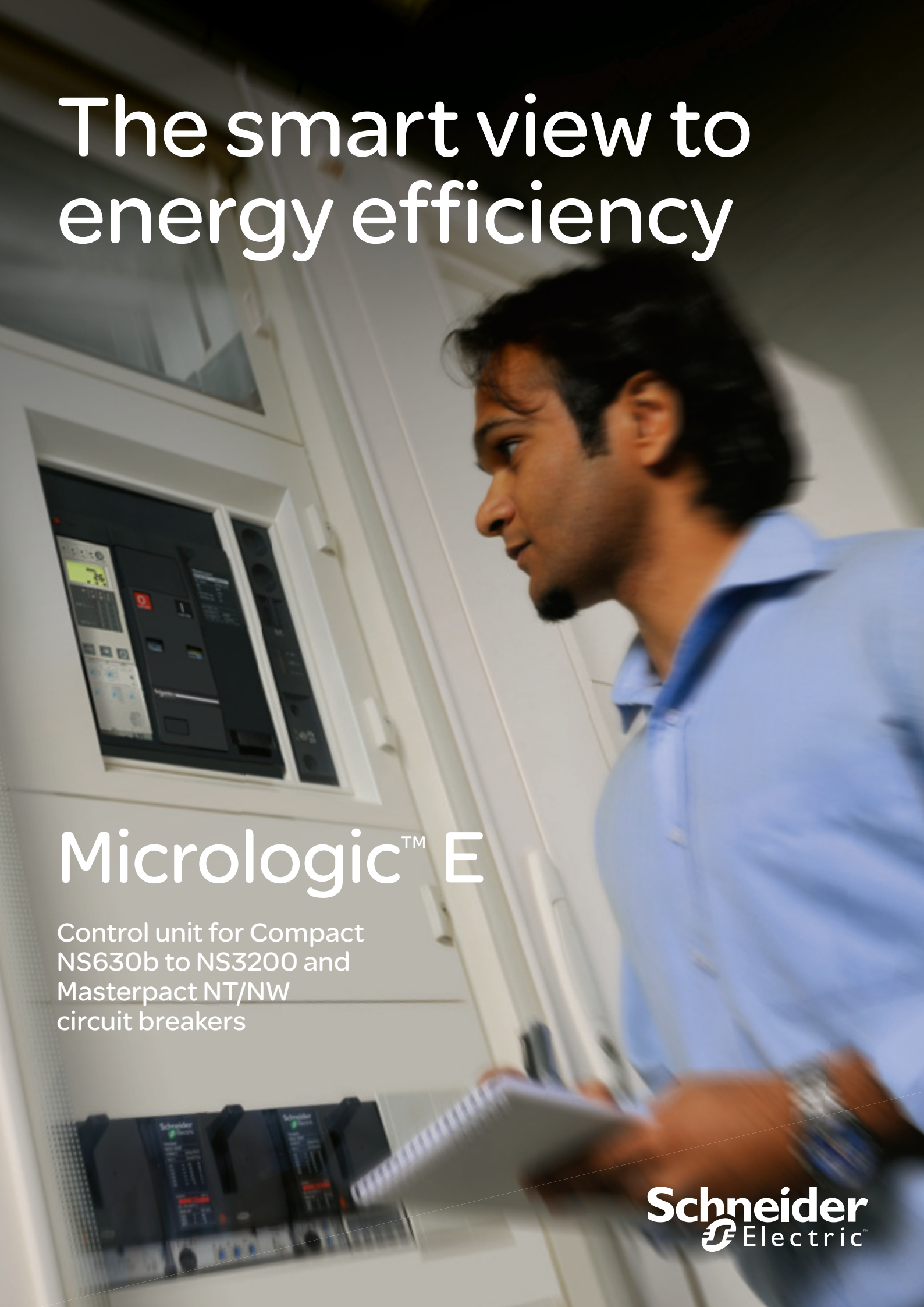
The smart view to energy efficiency



Micrologic™ E

Control unit for Compact NS630b to NS3200 and Masterpact NT/NW circuit breakers

Schneider Electric

Buildings can achieve up to 30% energy savings with an Active Energy Management™ programme that includes an energy metering system.*

* Programmes can also include the use of automation and control systems, monitoring and maintenance services, energy acquisition optimization, and renewable energy sources.

Micrologic E

Energy efficiency, now within your reach

The Micrologic E control unit is making intelligent, energy measurement-capable circuit breakers the new industry standard.

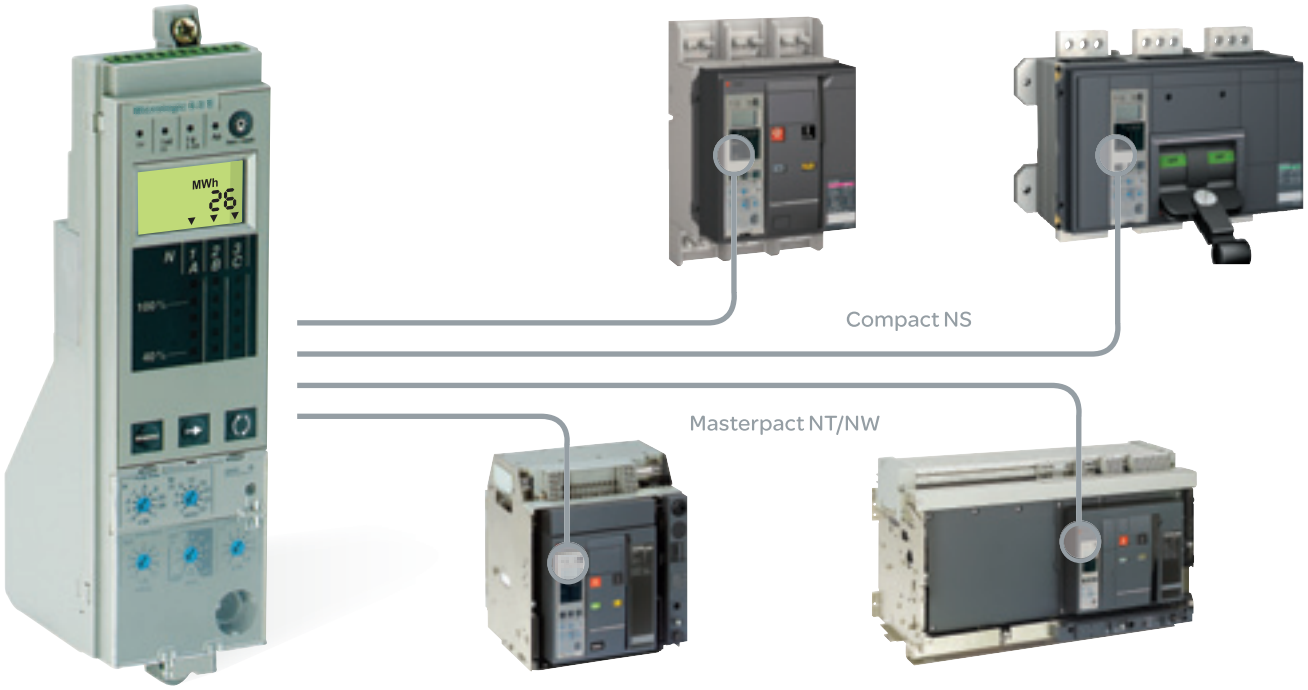
As energy costs increase and more stringent greenhouse gas emissions regulations are introduced, it's essential to find ways to reduce energy consumption.

Distributed energy metering is a critical first step. It will help you understand exactly where, when, and how much energy you are consuming throughout your facilities so you can discover opportunities to improve your efficiency.

The new Micrologic™ E control unit for Compact™ NS and Masterpact™ NT/NW circuit breakers puts energy metering at key points across your power grid in a way that is:

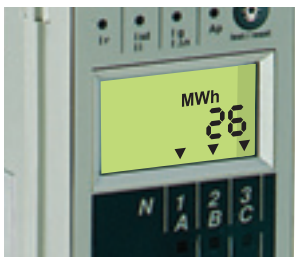
> Smart
> Safe
> Simple

It's the most affordable way to help you maximize your energy efficiency, control your costs, and meet your environmental objectives and responsibilities.



Smart

The intelligent way to put energy metering where you need it



Integrated LCD metering display

Get a meter in every breaker

Schneider Electric™ was the first to offer energy metering in a protective device at a cost-effective level, starting with the innovative Compact NSX circuit breaker. The Micrologic E control unit extends this offer across the Compact and Masterpact ranges, making it affordable to have energy measurement everywhere you have a breaker.

At only a small incremental cost, the Micrologic E delivers all of the protection and measurement features of our popular Micrologic A model, while delivering energy metering and other capabilities previously only available in the Micrologic P or H models.

Going beyond energy

Other essential features include current, voltage, power, trip history, and breaker maintenance data that will help you track the performance of your equipment, extend equipment life, and ensure the reliability of your power system.

Knowing more means saving more

The energy data from Micrologic E will help you study consumption patterns, compare the performance of different facilities, and isolate where energy is being wasted. Exposing the associated energy costs at the building, department, or machine level will drive efficiency.

Having integrated metering in your breakers can also complement existing tenant metering systems, helping you validate utility billing, or verify that consumption at upstream feeders matches the sum of the associated tenant meters.

It avoids the additional costs and panel space associated with installing a separate energy meter with current transformers.

The Micrologic E bridges the gap in the Micrologic family of industry-leading control units, joining a legacy of safety, flexibility, and ease of use.		No metering	A 'ammeter'	E 'energy'	P 'power'	H 'harmonics'
Measurements	Instantaneous current and maximeter		●	●	●	●
	Current demand, voltage, power factor, power, power demand, and energy*			●	●	●
	Cos-φ, frequency, per phase measurements (power, energy, PF,) and advanced protection				●	●
	Power quality (harmonics ≤ 31st order), waveform capture, enhanced alarm programming					●
Current protection type	**2 (L, I):** long time, instantaneous	2.0	2.0 A	2.0 E		
	5 (L, S, I): long time, short time, instantaneous	5.0	5.0 A	5.0 E	5.0 P	5.0 H
	6 (L, S, I, G): long time, short time, instantaneous, earth fault		6.0 A	6.0 E	6.0 P	6.0 H
	7 (L, S, I, V): long time, short time, instantaneous, earth leakage up to 3200A		7.0 A		7.0 P	7.0 H

* Active, reactive, and apparent power and energy. Accuracy of active energy is 2 percent (including the sensors).

Safe

Protection, metering, and communications, reliably in one device

Peace of mind

When power is critical, you need to trust that your breakers provide the highest level of protection available. That's why Schneider Electric has developed a unique, dual processing architecture that ensures that the protection function operates completely independent of the measurement and communication functions.

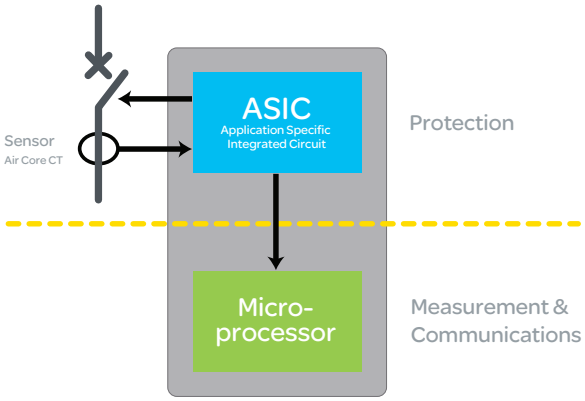
Protection and measurement units are also tested and certified together, guaranteeing the quality of both the breaker and the metering capability.

+

Protection and metering units are safely separated.

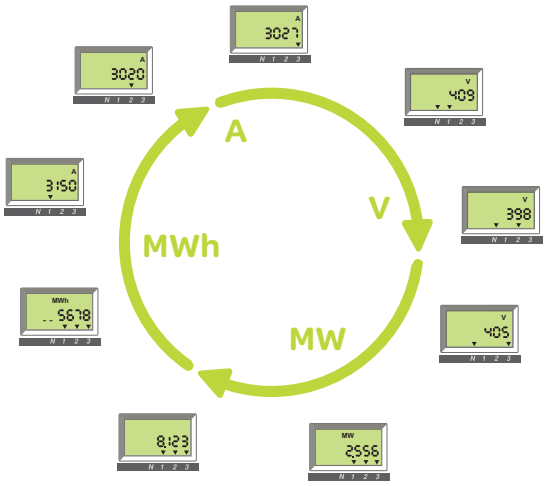
>

All parts are tested together to ensure reliability.



Automatic Scroll Quick View

With this new, innovative display mode, your maintenance personnel will never have to touch the front panel of the Micrologic E to view all the most relevant measurements, including current, voltage, power, and energy.

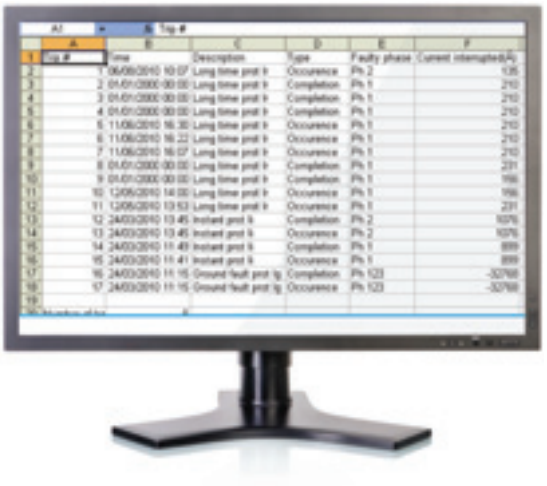


Fully capable yet easy to use

The Micrologic E is as easy to use as you've come to expect from all Micrologic controllers. While offering most of the protection options of the Micrologic A, the Micrologic E adds two features previously only available in the models P and H:

> Trip history for easy troubleshooting. The last ten trips are always memorized in non-volatile memory. View these through the Micrologic E display or through software, with each event including the trip cause, date, and time stamp.

Type, number, total number — Date of trip — Time of trip



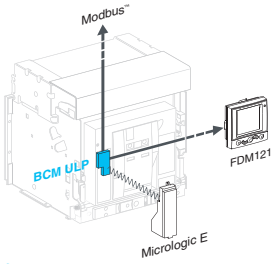
> Two relay outputs for coordinated control. Two M2C type relays are driven by trip events for a flexible choice of management functions. For example, a ground fault trip assigned to one output enables interlocking with medium-voltage equipment.

The scrolling display means you don't need to touch the panel.

The trip history is viewable through the Micrologic E display or through software, supporting easy troubleshooting.

Simple

Connect energy information to everyone that needs it



BCM ULP module enables local or remote data access

\+

Convenient data access from a panel

Convenient, local data access

The new BCM ULP communication module option for all Compact and Masterpact circuit breakers allows you to connect a high-visibility FDM121 front display module. Maintenance personnel will have convenient access to all Micrologic measurements, histories, and circuit breaker maintenance indicators directly from the panel of an electrical cabinet.

Easy, remote data access

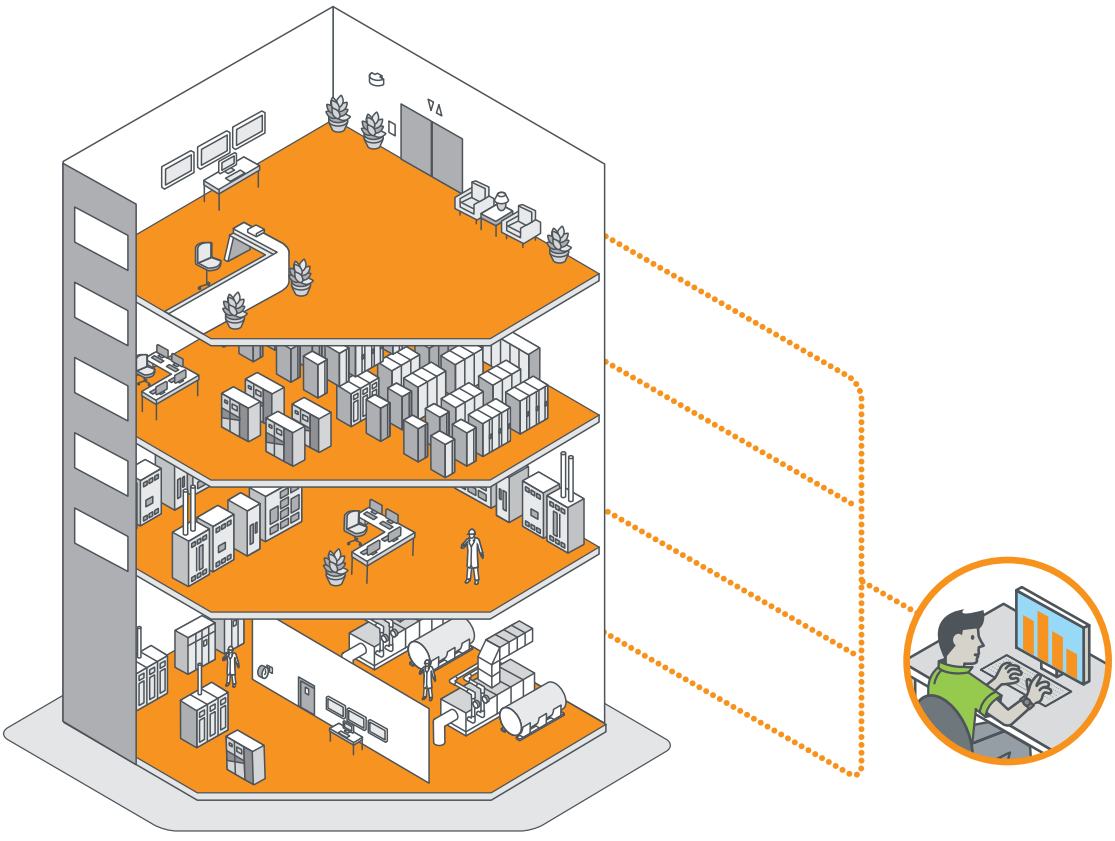
The new BCM ULP module also enables standard plug-and-play connectivity, making it easy for you to network your circuit breakers and other measurement or control devices across an entire building. With nearly unlimited scalability, the energy data from all of your Micrologic E control units can connect through web-enabled gateways or RTUs, to standard web browsers or user-friendly software for further analysis. Information will be easily accessible to anyone that needs it, supporting energy management strategies as well as remote maintenance and troubleshooting.

Automatically collect data from circuit breakers, meters, and sensors across your facility

Remote Control Utility (RCU) for simple data access and circuit breaker control

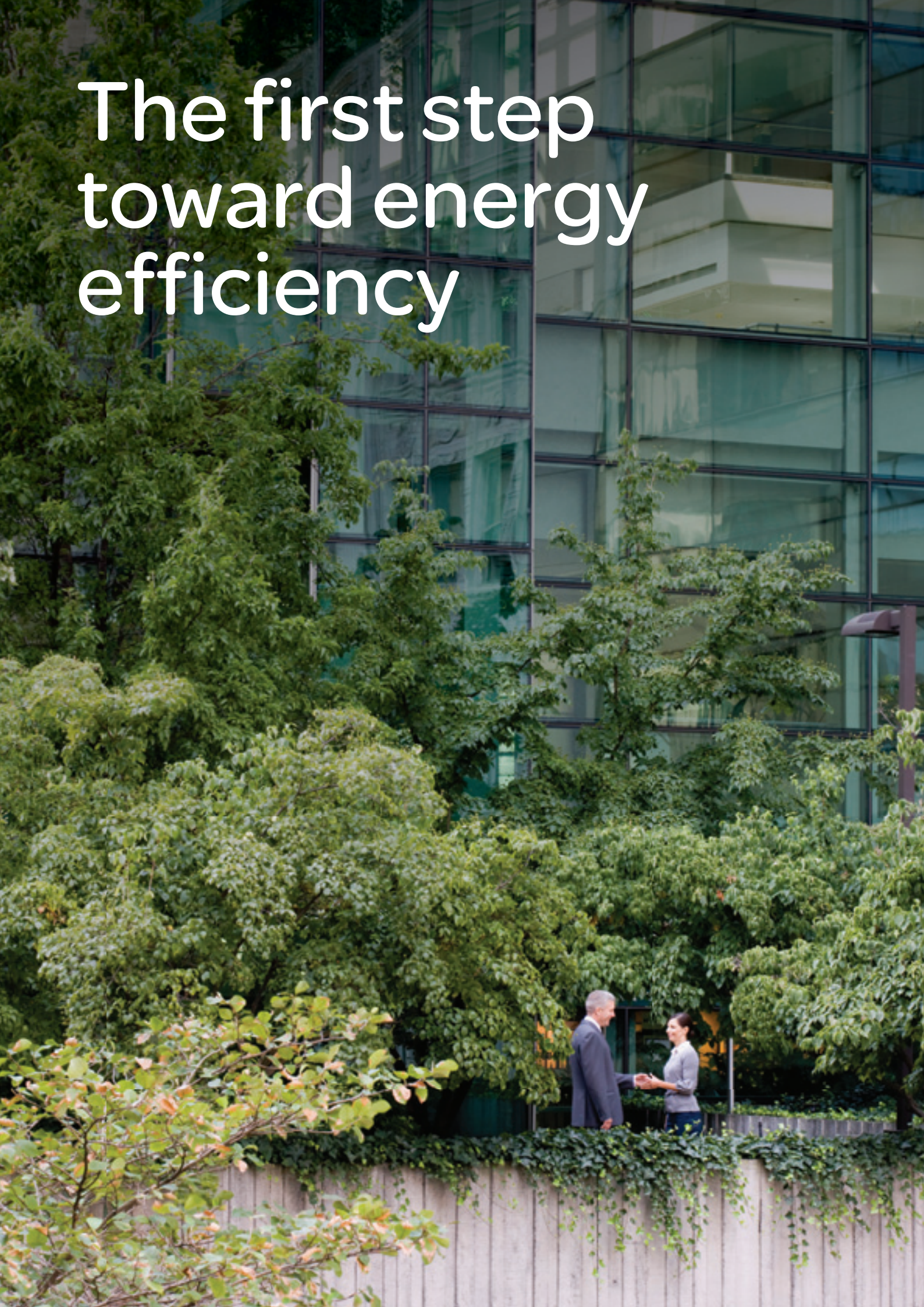
iRIO™ RTU or EGX300 gateway for data viewable using a standard web browser

PowerLogic™ ION Enterprise™ software for advanced energy and power quality analysis



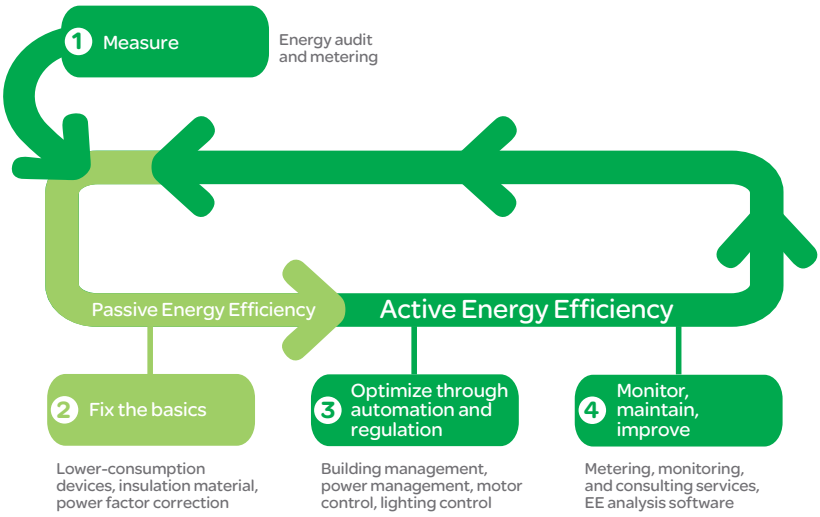
Facility and corporate managers analyse energy efficiency and costs, while maintenance personnel analyse electrical system reliability.

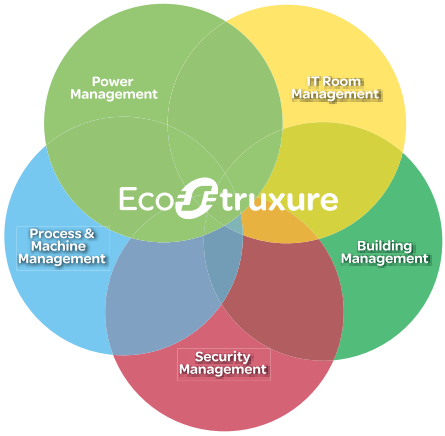
The first step toward energy efficiency



Thinking ahead

By including a Micrologic E control unit in each of your Compact NS and Masterpact NT/NW circuit breakers, you're making an important first step toward improved energy efficiency, in a way that is smart, safe, and simple. Schneider Electric can help you take the next steps necessary to achieve maximum efficiency for your entire building. We are the only global specialist in energy management providing an integrated approach to help you meet your efficiency targets.





The path to sustainable savings

The levels of efficiency required for effective energy management involve system dynamics across platforms and providers like never before. With our innovative EcoStruxure™ approach, we provide an Active Energy Management™ architecture from Power Plant to Plug™ to create intelligent energy management systems. These systems are simplified, save money, and reduce waste by guaranteeing compatibility between the management of power, process and machines, IT rooms, buildings, and security.

30%

Schneider Electric can help deliver up to 30% energy savings in industrial and commercial buildings.

Make the most of your energy™

Schneider Electric Singapore Pte Ltd.
(Co. Reg. No.: 197903476G)

10 Ang Mo Kio Street 65
#02-17/20 TechPoint
Singapore 569059
Tel: +65 6480 2001
Fax: +65 6484 7800
Email: customer.sg@schneider-electric.com
Website: www.schneider-electric.com.sg

Schneider Electric™