

EFOY Fuel Cells – a sure thing!



100% reliable power for security applications



A sure thing!

Security systems have to run reliably, around the clock and in all kinds of weather. After all, they're usually protecting valuable, and sometimes even strategic, facilities. Systems in remote locations present the additional challenge of requiring reliable, off-grid power. Even if a concealed 25-watt camera uses a "mere" 600 watt hours per day, that's a stretch for most of the traditional remote power systems available today. A battery will last only two days before it has to be replaced. And each time it is replaced, you risk detection. Solar cells are an option, but they don't generate enough electricity if the weather's bad. What's more, they're visible from far and wide – a sure tip-off that there's an electrical device somewhere nearby.

The solution: quiet, dependable power from a fuel cell

The Dutch company Tedas Security Solutions employs compact, quiet EFOY Pro Series Fuel Cells to power its mobile security systems and surveillance cameras. The benefits: the EFOY Pro connects to the device **invisibly**, either in a housing or in the practical EFOY ProCube, rendering it **theft-proof**. It works so **quietly** and **odor-free** that it's **undetectable**. And best of all, it keeps on working **weeks on end on its own**.

Customer example

Tedas Security Solutions NL

The challenge

To provide trouble-free mobile power to remote security systems. To provide an alternative to the expense and the inconvenience of batteries, generators or solar systems.

The solution

The EFOY Pro 1600

The benefits

100% availability

Electrical security systems gain increased independence

Reduced maintenance and, thus, risk of detection

Improved logistics

Fuel cell + battery



How it works

The EFOY Pro connects to the battery that powers the device. If voltage dips below a certain level, the EFOY Pro switches on automatically. Once the battery is completely recharged, the EFOY Pro automatically reverts to standby mode. The process involves no moving parts and no combustion whatsoever, emitting only carbon dioxide and water – no more than a child's breath.

EFOY
ENERGY FOR YOU



“The EFOY Pro has been a real godsend for us, especially for critical mobile applications where it can literally be a matter of life and death. There’s no source of power more reliable.”

Harriëtte van Kuijk
Tedas Security Solutions, NL

Efficient, economical, inconspicuous

⌚ Power 24/7

The EFOY Pro continues to produce power as long as there is fuel, around the clock and in all kinds of weather

⌚ Trouble free for weeks on end

A 10-liter EFOY Fuel Cartridge provides 11.1 kilowatt hours of electricity. That’s enough to power a 25-watt surveillance for nearly three weeks without the slightest intervention. EFOY Fuel Cartridges are available in sizes up to 28 liters

⌚ Quiet and inconspicuous

The EFOY Pro emits only 23 dB(A) at a distance of 7 meters, making it nearly inaudible. There’s less chance of a passerby discovering a concealed camera

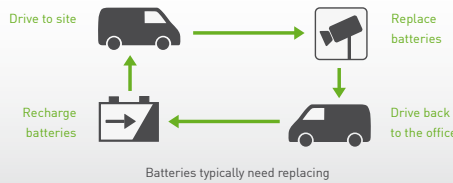
⌚ Ideal for undercover operations

The EFOY Pro works inaudibly and invisibly if concealed in the trunk of a car. The vehicle can stay parked for weeks on end – no need for maintenance

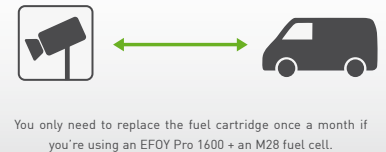
⌚ Reduced costs

The EFOY Pro cuts logistics costs. There’s less need for personnel to replace batteries or maintain generators. The EFOY Pro is completely maintenance free

Without EFOY Pro – battery replacement every 2 days



With the EFOY Pro – fuel cartridge replacement every 30 days



An EFOY Pro cuts costs

	Battery	EFOY Pro
Maintenance interval	2 days	26 days (28-liter fuel cartridge)
Man hours/monthly	37.5 hours @ 37.5 €	2.5 hours @ 37.5 €
Driving costs/monthly	1200 €	80 €
Fuel costs/monthly	0 €	71 €
Amortization/monthly	0 €	744 €

Assumptions

Distance to site: 100 km
Device rating: approx. 50 watts
Round-the-clock operation

Your ROI

You’ll save about 2355 € a month, which means that the EFOY Pro 1600 will pay for itself in 1.2 months! (That’s not even counting the costs of recharging and replacing batteries.)



Additional information
www.efoy.com

Your Partner

⌚ Remote control

You can operate the EFOY Pro via SMS or laptop. That means less chance of detection and lower personnel costs

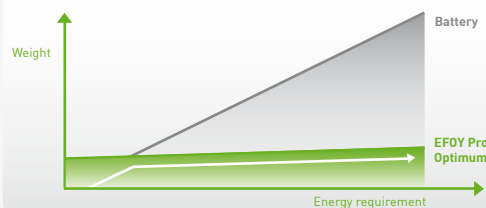
⌚ Odorless

The EFOY Pro emits only water and carbon dioxide in negligible amounts

⌚ Compact and light

Weighing in at a mere 8 kg and measuring approx. 44 x 19 x 28 cm, the EFOY Pro fits into any switch cabinet. It also comes in the EFOY ProCube for outdoor use

Weight savings in surveillance vehicles



An example

By using an EFOY Pro with EFOY Fuel Cartridges, weight can be reduced as the energy demand increases. The EFOY Fuel Cartridge combines great energy density with easy application and low costs. For example, for 10 kWh of electricity only 8 kg of fuel are needed, while batteries with the same energy density weigh around 270 kg.