

casestudy

product	customer	sector
 <p>Pnu Power 10TM 10kW Compressed Air Battery</p>	 <p>abertis telecom</p>	abertis telecom (www.abertistelem.com) is the telecoms infrastructures operator of Spain's abertis group, with 3,200 centres serving the broadcast media, security, emergency services and other telecoms companies.

Because Pnu Power Compressed Air Batteries require only periodic inspection, they are ideal for remote, unmanned installations



The Pnu Power Compressed Air Battery in this remote mountain location is neatly installed indoors, with its own air store and auto recharge compressor.

challenge

- protect **abertis telecom's** digital broadcast transmitter at Palleja, in the Catalanian mountains
- provide ride-through power for the site's generator installation, while minimising generator cut-in to reduce CO₂ emissions
- operate reliably in an unmanned, remote installation

solution

- Pnu Power 10TM with 380V 50Hz input and 380V three phase output
- integrated automatic recharge compressor and cylinder pack, with 35 Bar (507.5 PSI) air store
- complete system installed in the existing building, occupying a small footprint (external installation was an option)

benefits

- reliable UPS with reduced use of the diesel generator, which has a minimum operating cycle of 20 minutes
- no requirement for climate-controlled housing, even in harsh conditions: operating temperature -40 to +50°C (-40 to +122°F)
- very low maintenance, energy consumption and whole-life OPEX costs



Pnu Power
An Energetix Group Company

Compressed Air Batteries
the smarter backup choice

	Pnu Power³ 3kW Compressed Air Battery	Pnu Power⁵ 5kW Compressed Air Battery	Pnu Power¹⁰ 10kW Compressed Air Battery
Output	3kW	5kW	10kW
Height/Width/Depth	1700mm (66.9") x 800mm (31.5ins) x 600mm (23.6")	1700mm (66.9") x 800mm (31.5ins) x 600mm (23.6")	2200mm (86.6") x 800mm (31.5") x 800mm (31.5")
Weight	125kg (275lbs)	150kg (330lbs)	230kg (506lbs)
Supply Pressure	15 bar (217.5 psi)	28 bar (406 psi)	35 bar (507.5 psi)
Run Time from standard extendable cylinder pack	40 minutes	24 minutes	12 minutes

standard specifications

POWER	
AC Voltage	Customer specified: 110-240 Vac 1 Phase, 380-480Vac 3 Phase 50/60Hz
DC Voltage	Customer specified: 12-340 Vdc +/-ve grounding available as standard
AC + DC	Multiple outputs available
Voltage regulation	+/- 0.5%
OPERATIONAL SPECIFICATIONS	
Mode	Standby or UPS power
ENERGY SOURCE	
Source	High pressure cylinders or medium pressure plant main
Air quality	Standard industrial
Recharge type	Cylinder replacement or automatic compressor
ENVIRONMENTAL	
Operating temperature	-40 to +50°C (-40 to +122°F)
Storage temperature	-40 to +60°C (-40 to +140°F)
Humidity	>95% non-condensing
Heat dissipation	<100W in standby mode
Noise	<65dBA at 5m as standard across range
Enclosure	Standard industrial: internal & external options
INSTRUMENTATION	
Local	LCD display shows run time remaining and operational status
Remote	Ethernet (TCP-IP) or standard modem
STANDARDS	
Safety	CE Certified
Emissions	CE Certified
Immunity	CE Certified



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Technical Information & Support

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