



RESPIRE

Radon real time
monitoring system



PROTOTYPES DEVELOPMENT

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Elica Spa
Elica Spa



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Elica corporation



Company Name	Elica SpA	Turnover	479,3
Date of establishment of the Company	August 5, 1970	EBITDAadjusted*	36,8
Listing Date	November 10, 2006	EBITDA	34,5
President	Francesco Casoli	EBIT adjusted*	16,3
CEO	Antonio Recinella	Number of production sites	7
Number of employees	About 3.800		
Annual Production	More than 20,9 million units		

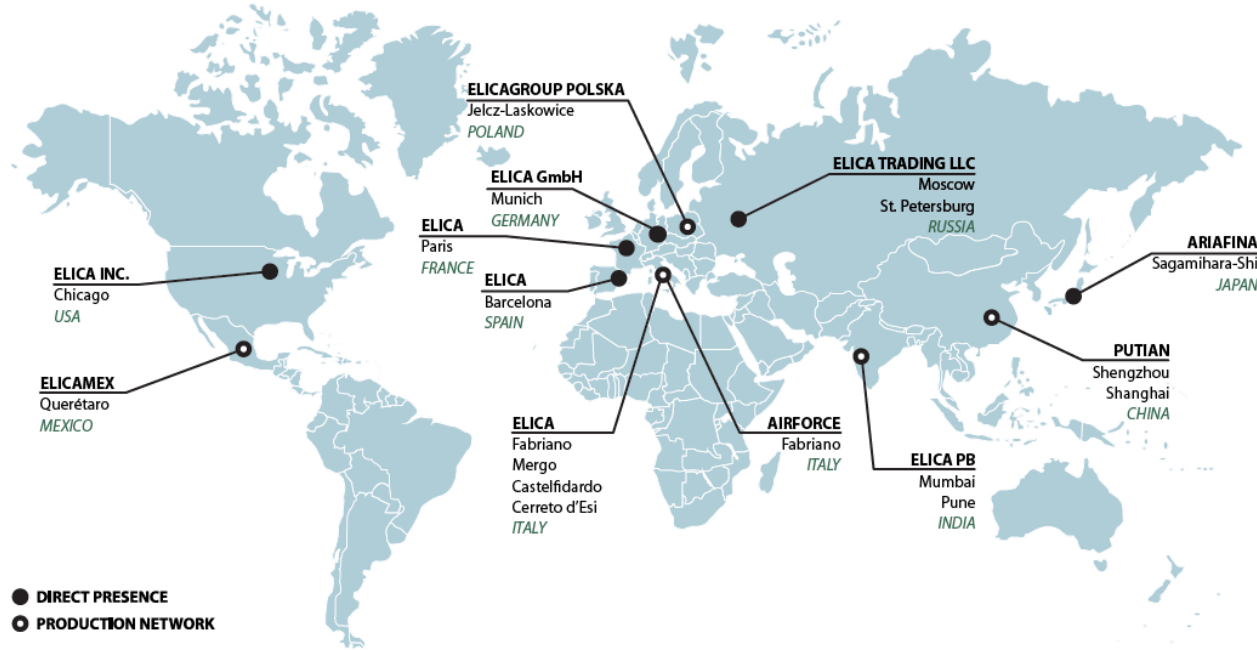
Website

elica.com



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Elica worldwide





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Products



Lego, 1972



Menhir, 1999
design David Lewis



Om, 2004
Elica Design Center



Star, 2006
Elica Design Center



Space, 2008
Elica Design Center



Bubble, 2010
design Stefano Giovannoni



Feel, 2010
Design Fabrizio Crisà



Sweet, 2012
Design Fabrizio Crisà



35cc, 2012
design Fabrizio Crisà



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Products



SNAP is the innovative aspiration system that automatically monitors and improves air quality in your living space, in order to ensure you and your family a sense of well-being.



Thanks to its three sensors and its advanced system of algorithms, Snap can register humidity, temperature and air-quality levels , in order to calibrate its operation according to the characteristics of each single room and your expectations .

SNAP automatically activates an air-flow exchange, whenever it detects the presence of pollutants or an excess of humidity .





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SNAP

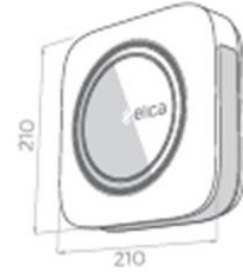


LIGHT SIGNALS

Active Functions:	RGB CENTRAL LED
Working and other states:	RGB CROWN LED

DIMENSIONS

Wide:	210 mm
Tall:	210 mm
Deep:	61+69 mm
Hole (Ø):	119 mm



SYSTEM REQUIREMENTS

Wi-Fi connection	
Smartphone or Tablet:	with IOS 7 or later - with Android 4.03 or later

WIRELESS

Supported Wireless Security:	open, WEP, WPA2
Working Wi-Fi Connection:	802.11 b/g/n @ 2.4GHz
SSID:	not hidden
Wi-Fi enterprise connection:	not supported



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SNAP



TECHNICAL DATA

Supply Voltage (Vac):	230/50Hz
Power Consumption (W):	3 (min speed) - 7 (max speed)
Airflow (m3/h):	60 (min speed) - 150 (max speed)
Revolution (RPM):	1650±50 (min speed) - 2350±50 (max speed)
Pressure (Pa):	28 (min speed) - 56 (max speed)
Noise Lw (dBA):	47 (min speed) - 60 (max speed)
Noise Lp at 3 mt (dBA):	27 (min speed) - 40 (max speed)

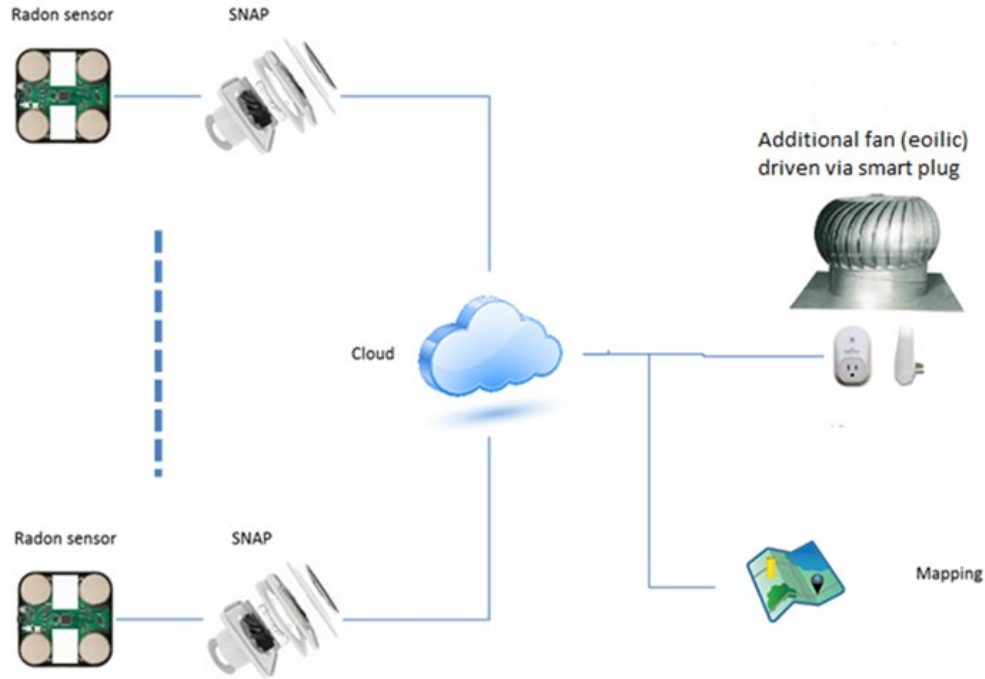
SENSORS

Temperature:	-40°C to +125°C		
Humidity:	0 to 100%		
Air Quality:	Hydrogen (H2)	1 to 1000 ppm	
	Carbon Monoxide (CO)	5 to 1000 ppm	
	Propane (C3H8)	3 to 2000 ppm	(10% LIE)
	Iso-Butane (C4H10)	5 to 2000 ppm	(10% LIE)
	Ethanol (C2H6O)	1 to 1000 ppm	
	Methane (CH4)	200 to 3000 ppm	
	Ammonia (NH3)	5 to 1000 ppm	



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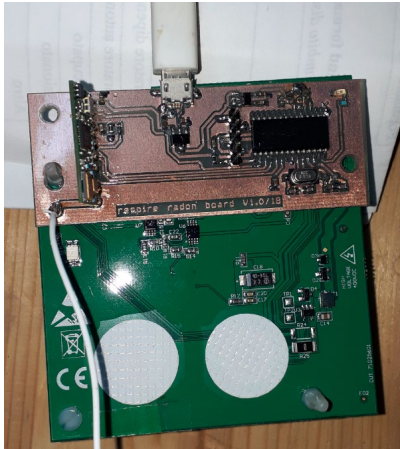
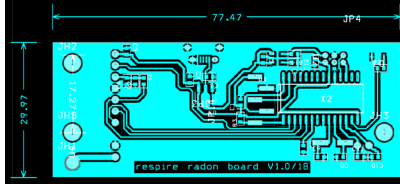
System architecture





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Sensor





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System description



- Radon sensor send periodically data to SNAP;
- If received value is over threshold fan starts;
- Data are sent to cloud: to feed the data base and/or to control supplementary fan;





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System description



$$C_{Rn} < 100 \text{ Bq/m}^3$$





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System description



$$100 < C_{Rn} < 300 \text{ Bq/m}^3$$



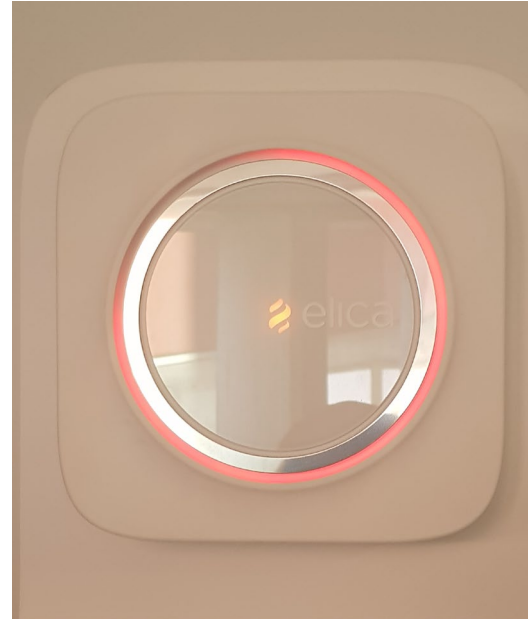


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System description



$$C_{Rn} > 300 \text{ Bq/m}^3$$





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System description



```
Nuova scheda x 96.8.113.62 x
Non sicuro | 96.8.113.62

[CurrFanLevel] => 0
[CurrTemp] => 26
[CurrRH] => 49
[Radon_val] => 0
[SnapID] => 9
)

08/28/18_16:14:09:23
Array
(
    [SnapCurrMode] => 0
    [CurrFanLevel] => 0
    [CurrTemp] => 26
    [CurrRH] => 47
    [Radon_val] => 3102
    [SnapID] => 4
)

08/28/18_16:16:50:37
Array
(
    [SnapCurrMode] => 4
    [CurrFanLevel] => 0
    [CurrTemp] => 26
    [CurrRH] => 48
    [Radon_val] => 0
    [SnapID] => 9
)

08/28/18_16:20:00:66
Array
(
    [SnapCurrMode] => 4
    [CurrFanLevel] => 3
    [CurrTemp] => 26
    [CurrRH] => 49
    [Radon_val] => 330
    [SnapID] => 9
)
```



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 **elica**
aria nuova



Thank you!

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