

# E-CAT QX

Third generation of the patented **E-Cat** technology:

A **heat source** built on a low energy nuclear reaction (**LENR**) with a fuel based primarily on nickel, aluminum, hydrogen and lithium, with **no radiation** and with **no radioactive waste**.

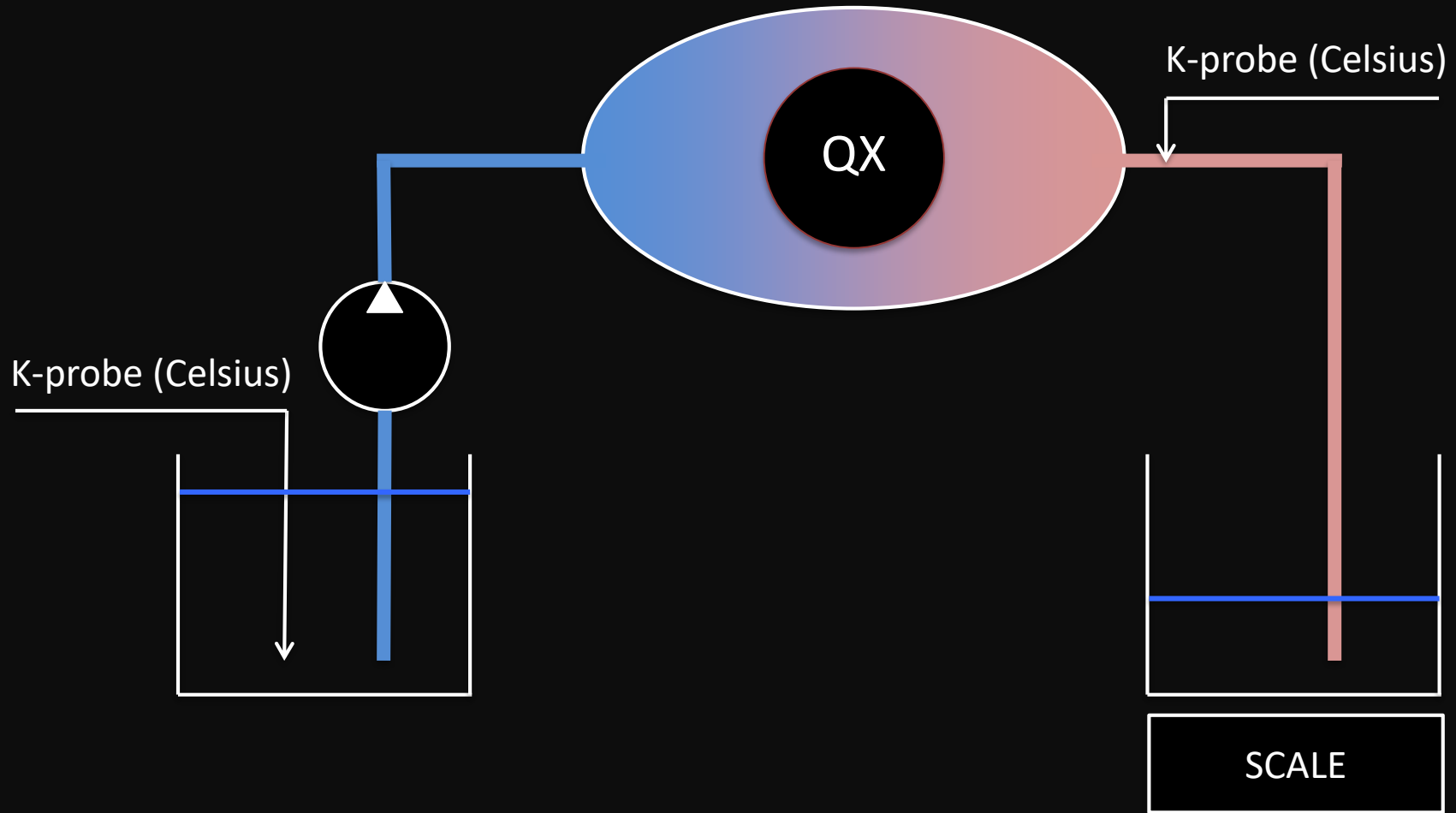
Claims E-Cat QX:

- volume  $\approx 1 \text{ cm}^3$
- thermal output 10-30 W
- negligible input control power
- internal temperature  $> 2,600^\circ \text{ C}$
- no radiation above background

Today: Cluster of 3 E-Cat QX

# TEST PROTOCOL

Thermal output



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Thermal output

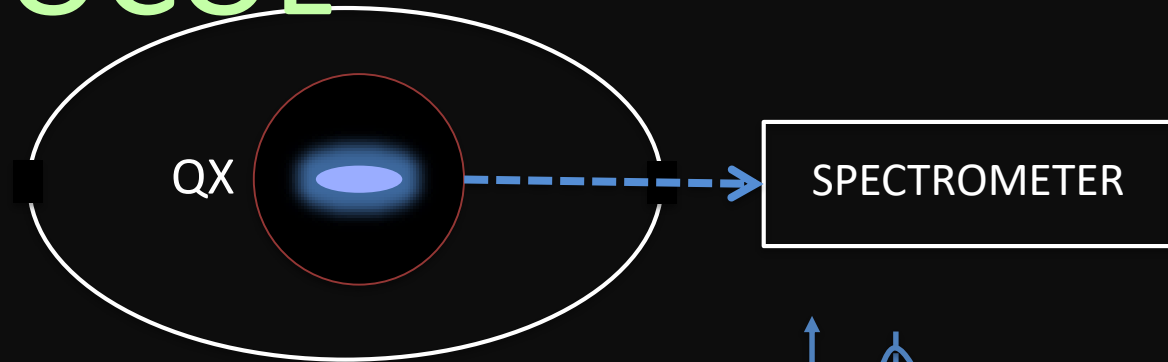
$$W = m_{\text{water}} * C_p * \Delta T$$

$$C_p \text{ water} = 4.18 \text{ J}/(\text{g}\cdot\text{K})$$

$$P_{\text{av}} = W/t$$

# TEST PROTOCOL

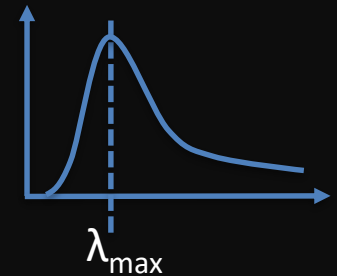
Thermal output



**Wien's displacement law:**

$$\lambda_{\max} = b/T \quad \text{or} \quad T = b/\lambda_{\max}$$

where  $b \approx 2900 \mu\text{m}\cdot\text{K}$



**Stefan–Boltzmann law:**

$$P = A\varepsilon\sigma T^4$$

where

$A$  = area

$\varepsilon$  = emissivity

$\sigma \approx 5.67 \times 10^{-8} \text{ W}/(\text{m}^2\cdot\text{K}^4)$

# TEST PROTOCOL

Electric input

$$I = U/R$$

$$P = UI$$

$$P = RI^2$$

$$800 * 0.25^2 \approx 50 \text{ W}$$

