



Active distributed temperature measurements provide information about thermal transport at all locations along a fiber optic cable. This insight can be crucial for monitoring fluid presence and flow in environments with limited natural thermal gradients, or for characterizing thermal properties in-situ.

Silixa's Heat Pulse System (HPS) allows the heating of a fibre optic cable by supplying time and power-controlled pulses. It operates with an electric power supply and an optical fibre cable with embedded heating elements. HPS can be combined with any Silixa distributed temperature sensor to provide a complete monitoring solution, with both units controlled by a shared interface. The total measurement time, frequency and intensity of the heating cycles can be set to meet the measurement requirements of the installation.

Specifications:

Typical deployment example

Output power	Heated length	Cable resistance	Power rate	Temperature increase*
30 kW	1 km	42 Ω/km	17 W/m	5° C

\*Example based on a standard hybrid cable with 2X18AWG twisted copper conductor as heating elements. The copper conductors are wired in series at the far end of the cable.

Power

inlet: 220 - 600VAC, up to 50Amps
outlet: 0 - 600VAC, up to 50Amps (max power :30kW)

Communication options

2 x ethernet port
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Physical dimensions, IP66 enclosure

Height	Width	Depth	Weight
730 mm	600 mm	250 mm	42 kg

Operating environment

Temperature: 0°C - 50°C
Humidity: 20% - 90% RH non-condensing

Panel PC

Rated IP65
OS: Windows7 (64bit)

Certification & Compliance

Safety	EMC	FCC	CE Mark
BS EN ISO 12100 BS EN 60204-1	BS EN 61000-6-2 BS EN 61000-6-4	CFR 47:2008 Part 15 Sub Part B	2014/35/EU (safety) 2014/30/EU (EMC)



Environmental & Infrastructure

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