

PWS & PWL

Protective window for Calex infrared temperature sensors



The protective window models PWS and PWL are designed to help protect the germanium lens of Calex infrared temperature sensors from mechanical damage, and to help retain fragments of the lens if it is damaged. These windows may be used with sensors that have a measurement wavelength of 8 to 14 μm and an adjustable emissivity setting.

Compatibility:

Sensor model	Window model
PyroMini	PWS
PyroEpsilon	
PyroBus	
PyroUSB	PWL

These windows are not suitable for use with sensors that have a fixed emissivity setting, such as the PyroCouple.

Using the window

1. Mount the infrared temperature sensor as normal using the mounting nut supplied with the sensor. Ensure at least 3.5 mm of thread is available for the window holder.
2. Screw the window in its stainless steel holder fully onto the lens of the sensor. Tighten it with a spanner.
3. Calculate the correct emissivity setting to use to compensate for the presence of the window: multiply the target emissivity (or the emissivity setting that was used without the window in place) by 0.768. For example:

Target emissivity 0.95	\times	Window transmissivity 0.768	$=$	Emissivity setting 0.73
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4. Apply the new emissivity setting to the sensor (refer to the sensor manual).
5. Begin measuring the temperature.

Ambient temperature

The PWS and PWL may be used at ambient temperatures up to 100°C. Ensure the sensor is also being used within its operating temperature limits - see the sensor manual for details.