



105SL™ with printhead heater

Printhead heater: a hot solution to a cool problem

Printers which are used in chilled distribution centres storing fresh produce at between 1°C to 5°C, or printers situated next to a goods-in door in winter or in cold regions are affected by cold temperatures which cause the print quality to deteriorate leading to unreadable barcodes and other printed information.

Zebra Technologies Corporation has developed a custom version of the rugged and reliable all-metal 105SL printer with a heater fitted to the printhead mechanism for use in these low temperature environments.

The standard Zebra 105SL printer is specified down to a minimum operating temperature of 5°C. The custom printer provides automatic printhead temperature compensation to cope with constant temperature environments as low as 0°C or where the temperature drops below 0°C for short periods of time such as when a warehouse door is opened to cold or freezing environments.

The heater element mounted on the printing mechanism provides a constant heat source for the printhead which is controlled by custom logic boards and firmware inside the printer. In addition, it has an automatically re-settable thermal protection device to act as a safety feature to disconnect power to the heater element in the event of an unexpected fault condition.

This solution provides more consistent print quality and may also extend printhead life in a cool temperature environment. Major printhead manufacturers recognise that a well-controlled external printhead heater will improve both print quality and printhead pulse life at cold ambient temperatures compared to increasing the printhead power. This system also eliminates the need for the end user to repeatedly adjust the printer darkness setting as the operating environment temperature changes.

When the printer is switched on, the printhead temperature is checked and the heater is activated if the temperature is cold. The LCD will show "Warning Head Warming" during this warm-up period which may last up to 3.5 minutes depending on the environment temperature. When the printhead is at the correct temperature, the warning message clears and the printer is ready for operation. The printer's firmware continuously monitors the printhead to ensure the optimum temperature is maintained to provide consistent print quality without causing any reduction in label throughput.

To comply with UL and CE regulations the printhead heater is available as a factory option only. All standard options and accessories can be used with the printhead heater enabled 105SL but please note that the electronics for the heater is installed in one of the rear option slots.

From 22 January 2008 the List Price of the Printhead Heater option is reduced to €555.00. Initially the option is released on two 105SL configurations; standard 105SL, P/N 1051Y-200E-0000 list price €2550 and with Ethernet, P/N 1051Y-200E-0030 list price €2725.

For further information on the Printhead Heater or to request other 105SL configurations please contact Peter Gooding, Custom Product Manager at pgooding@zebra.com or on +44 (0)1494 768294.

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