HENGSTLER®

C-56™ Thermal Receipt Printer

The ideal solution for low-cost receipt printing!
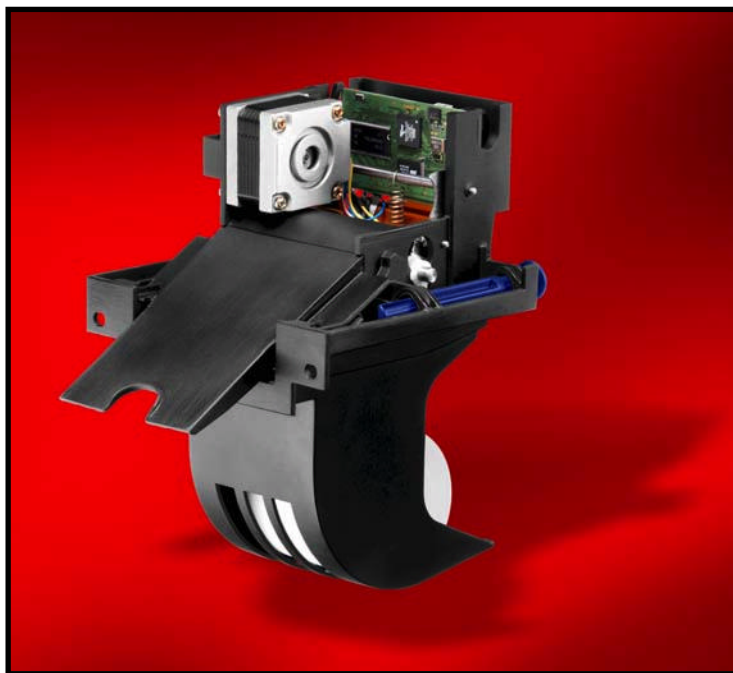
Perfect for receipting!

- **Economically priced**
- **Fast USB or serial interface**
- **Prints up to 220 mm/second**
- **Paper width of 58-60 mm**
- **Patented tear bar design prevents vandalism**

The HENGSTLER® C-56 Thermal Receipt Printer is the ideal printer for receipt printing. Handling a paper width of 58-60 mm, the HENGSTLER® C-56 printer prints at speeds up to 220 mm/second (8.6 inches/second)! A unique, patented tear bar assembly prevents vandals from pulling the paper out of the printer; it tears off instead if this is attempted. The design includes an integral chute that protrudes from the front of your panel, making mounting and integration simple. The HENGSTLER® C-56 printer will pull a 4 inch diameter paper roll from its integral paper tray to provide extended operation between refills. An extensive, powerful set of printer commands gives the C-56 unrivaled versatility! A single sensor detects "out of paper" and "paper low". The HENGSTLER® C-56 printer is the most cost-effective receipting solution you've ever encountered!

Have a receipt printer need? Let HENGSTLER® and C-56 handle it for you!

HENGSTLER® C-56™ Thermal Receipt Printer
Printer Command Highlights – V3.00

In addition to the commands found in most printers, the C-56 has some unique functions that give the designer much greater control over the printer and flexibility in its application. Most of these commands can also be executed through the C-56 Windows driver, making the C-56 one of the most versatile printers ever built! Some of the more versatile commands are highlighted here.

Print Speed Setting – The print speed of the C-56 can be set in several different ways. One command sets the print speed to one of several preset values, while the other allows the designer to select any print speed at all within the C-56's range. It is sometimes desirable to reduce the print speed to lower average current consumption when using a limited capacity power supply, or pulling a very large paper roll.

Printhead Heating Time Adjustment – The C-56 allows the adjustment of the total heating time, which controls how dark the printout will be. This is very useful in adjusting the printer to provide optimized printouts with various paper types.

Dot History Pre-Burn – This feature allows the printer to be "tuned" to compensate for residual heat build-up in the thermal heating elements that make up the printhead. With this feature enabled, the on-time of the heating elements (the "burn") is broken into two parts, a pre-burn phase and a main-burn phase. If an individual heating element has been burned while printing the previous dot row (and therefore has some residual heat), it is not heated during the pre-burn phase. All dots that are required to form the dot line are fired during the main-burn phase. The benefit to this feature is that it provides a way to prevent the overheating of large, dark areas, which results in adjacent areas that should remain white being blackened due to excess heat.

Temperature Dependent Burn Time Corrections – Thermal printers work by heating an individual element up to a certain temperature that will cause thermal paper to change color. Each element is turned on for a certain time as described above. But what if the ambient temperature is very high, or very low? That's where this feature comes in. It allows you to specify a series of corrections based on ambient temperature as measured by the printer, adding burn time if it's cold, and shortening burn time if it's warm. The result is consistent printout quality over the temperature range of the C-56.

Multi-Strobe Burn Factor – If you need to keep current consumption down, this feature is a big help. It allows each half of the printhead to burn separately, thereby consuming less current.

Customer Specific Part Number and Serial Number – A common problem for OEMs is keeping track of component modules, such as printers, that have been purchased elsewhere and installed in their equipment. The C-56 makes this easy by allowing the OEM to insert his part number and serial number into the printer. Whenever a new paper roll is inserted, this information will print out, making it easy to track the history of a component without worrying about the manufacturer's part and serial numbers.

Compressed Graphics – While it's rarely an issue with USB, serial printers are notorious for taking forever to print graphics. The C-56 addresses this problem by offering very fast baud rates in our serial version (115,200 baud), and also by allowing compressed graphics to be sent to the printer. This reduces the number of bytes sent to the printer to create a particular dot line, thereby increasing throughput and reducing or eliminating the serial bottleneck.

Rotation – Sometimes you just need to rotate what you're printing, for layout, readability, or appearance. The C-56 allows for rotation of text, images and barcodes, making the programmer's life as easy as possible.

Print Job Successful – By using the Parameter Transmission function at the end of a print job, the C-56 will acknowledge whether the print job was successfully received.

For a more complete listing of C-56 commands, request the C-56 Emulation Manual for firmware V3.00 and later.

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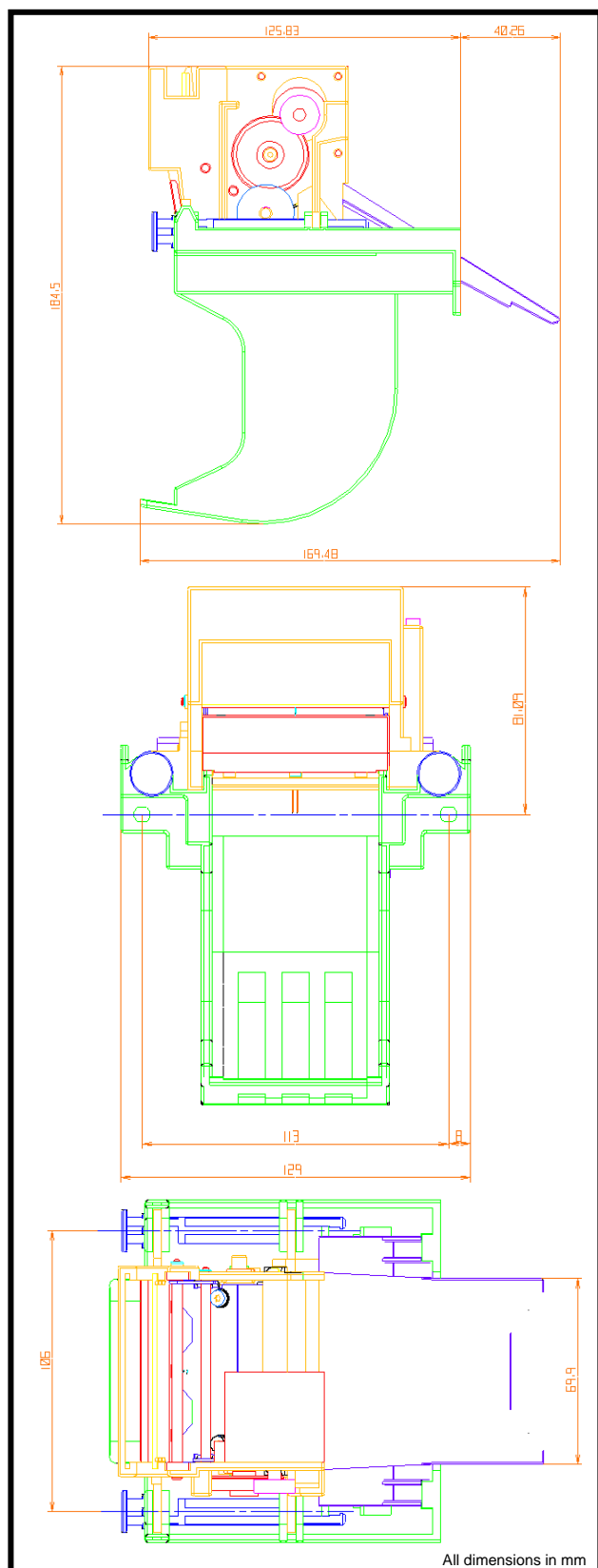
Specifications

Technology: Direct Thermal
Print Speed: Up to 8.6 ips (220 mm/sec)
Resolution: 203 dpi (8 dots/mm)
Total No. Dots: 448

Printhead Life
Abrasion (based 100 km of paper
on 12.5% print density)
Electrical: 100 million dot pulses
Graphic Driver: Windows® 2000/XP, Linux
Bar Codes:
Internally Generated: UPC-A, UPC-E, EAN-13, EAN-8, Code 39, Interleaved 2 of 5, Code 128, Codabar
Externally Generated: Any, generated by Windows® standard GDI file by host
Paper Width: 2.28 to 2.36 inches (58-60 mm)
Printable Width: 2.20 inches (56 mm)
Paper Weight: 50 to 60 g/m²
Paper Capacity: 4 inch (100 mm) roll diameter
Interface Type: USB 1.1 or RS-232
Serial Baud Rate: 9,600 to 115,200 baud
Operating Voltage: 24 VDC± 5%
Power Consumption:
In standby, approx. 3.6 VA
Typical, approx. Print speed/content dependent
Peak, approx. Print speed/content dependent
Tear Bar Type: Full cut/vandal resistant
Dimensions (WxHxD): See drawing; fits in an envelope 5.1 x 7.3 x 5.5 inches (130 x 186 x 139 mm)

Temperature Range
Operating: -30ºC to +70ºC
For Guaranteed Print Quality: +5ºC to +50ºC
Storage: -40ºC to +85ºC
Humidity
Operating: 20%-90% RH, non-condensing
For Guaranteed Print Quality: 20%-80% RH, non-condensing
Storage: 5%-95% RH, non-condensing
Part Number: 0 684 010 (USB)
0 684 011 (RS-232)

Innovation by **HENGSTLER**

C-56
Fast and Furious

All specifications subject to change without prior notice.
The C-56 printer was previously designated "SPM 56".
"HENGSTLER" is a registered trademark of Danaher Corporation.
"Windows" is a trademark of Microsoft Corporation.

All dimensions in mm

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