Thermal Receipt Printers in a Kitchen Environment

Changing Technology in Modern Kitchens

Traditional impact printers have long been the backbone of kitchen order management, however thermal printers are increasingly becoming the kitchen printer of choice with a greater range of connectivity options and printer formats offering a more streamlined and flexible solution.

Modern restaurant kitchens have embraced the newest technology, relying on Kitchen Display Systems (KDS) to manage orders and stock levels efficiently. At the heart of the KDS system, you'll find thermal printers. These peripherals are vital for ensuring that orders are delivered accurately and on time.

Thermal printers operate on a simple yet effective principle: a print head applies controlled heat to the thermal paper, which reacts by changing color and forming text or graphics. This process doesn't involve any ink or toner, making thermal printers cost-effective and easy to maintain. The simplicity and speed of this technology make thermal printers a popular choice for a wide range of applications, from receipts and labels to kitchen order tickets.

Advantages of Thermal Printers

In the hectic environment of a busy restaurant kitchen, time is of the essence. Thermal printers usually have an impressive print speed when compared to impact printers. The TSP100IV and mC-Print3 from Star make a great choice with their fast 250mm/sec print speed. Faster print speed reduces wait times for diners and allows kitchen staff to focus on what they do best – preparing and serving delicious meals. Moreover, the only consumable in the printer is the roll of paper, which simplifies maintenance and significantly reduces downtime.

Anyone who has worked in a restaurant kitchen knows how important an efficient work environment is. Thermal printers, with their near silent printing don't add to the general noise level and allow the same type of printer to be used front of house and in the kitchen as well as receiving remote orders, offering redundancy. If kitchen staff need to be alerted to incoming orders, Star offer a range of buzzers which can be configured with a variety of sounds for different order types as well as LED lights for visual confirmation.

TSP143IV

Advantages of Thermal Printers

Star printers have the ability to print flat receipts which is especially beneficial for kitchens that frequently receive long order tickets. Traditional impact printers can often produce curled long tickets, making them difficult to read. Flat-print technology ensures that each item on an order ticket is legible and well-organised.

Flexibility is a key advantage in the fast-paced restaurant industry. While Star offers wireless and Cloud connected impact printers, the sheer choice of connectivity on thermal printers make them a more flexible option. Bluetooth, WiFi and Cloud connected thermal printers allow kitchen staff to place the printer where it's most convenient, reducing the need for staff to constantly move around the kitchen.

Lastly, spills are almost inevitable in a busy kitchen. The mC-Print3 and mC-Label from Star are designed with an IPX2 or IP22 splash-proof, easy-to-clean casings and a protected control board to withstand spills. Their robust design ensures that they remain operational even in challenging, unpredictable kitchen conditions. Some models offer wall mounting to vastly reduce the risk of liquid contamination and reduction of valuable counter space.

mC-Label3

Addressing Concerns

The primary concern of using a thermal printer in kitchens are heat and humidity, which can damage heat-sensitive receipt paper. Although receipt papers can turn darker when in direct contact with heat, this can be avoided by installing the receipt printer away from direct heat sources and handling receipts thoughtfully. Logically, you wouldn't put the receipts near cooking equipment, in the oven or on a heat lamp. Nevertheless there are heat-resistant thermal paper and label options which can withstand the hottest environments.

Another concern restaurant owners have about thermal receipt printers is the ability to print multiple copies at once, which can easily be resolved by customising settings in your software. If needed, printers can be set-up to print 2 or 3 copies of the same receipts. Considering the faster print speed, you get all the copies you need in no time.

Many restaurants are already using thermal printers not only in the front but also in the back of their restaurants. When weighing the advantages and disadvantages it is clear that thermal printers can enhance your restaurant operations. Nevertheless, it's important to consider your specific business model and kitchen equipment when making this transition.

About Star Micronics

As a complete point-of-sale solutions provider, Star offers a wealth of options including a wide range of unique desktop POS, mobile and self-service terminal printers for printing receipts, tickets and labels from traditional systems, tablets and mobile devices as well as from web and cloud-based apps. Its compact and versatile cloud solutions are ideal for a variety of applications including Click & Collect in-store orders, event ticketing, home delivery, online or at table food ordering, transport ticketing etc. Additionally, Star provides tablet stands, display stands and cash management solutions to complete the hardware offering.