

POWER AND CABLING REQUIREMENTS

SITE READINESS INFORMATION

GENERAL:

The purpose of this document is to provide the necessary information required for site preparation and setup of the POS system. This document describes the proper power lines and communication cables needed for the implementation of the system.

ENVIRONMENT:

Operation Temperature: 32 degrees to 100 degrees Fahrenheit - Operation Humidity 35 to 85 percent relative humidity. All POS hardware should be used in a clean environment. Equipment locations should not be exposed to direct sunlight, should have good ventilation and should NOT be located near heating elements (i.e. incandescent lamps, fluorescent lights and/or heaters).

POWER REQUIREMENTS:

Dedicated Isolated Power Supply:

A dedicated - isolated power supply, independent of the power supplies system for other electrical equipment, should be installed. It is required that an exclusive (dedicated and isolated) power source be established for POS and peripherals, which are connected via transmission cable in the system configuration. A typical way of achieving an exclusive (dedicated and isolated) power source is to derive a power supply for the system from the building's main panel and provide an exclusive sub-panel and circuit breaker for the POS equipment. The receptacles (outlets) should be labeled "For POS Use Only" to avoid accidental connection of other electrical dedicated power lines.

All electrical wiring for the POS system should be in "home run" from the POS Panel to each receptacle. No other electrical circuits may be run in the same conduit as the dedicated wiring for POS.

Electrical Isolation: A separate isolated Ground Bar is required for POS. A separate isolated Neutral Bar is recommended, as well.

All receptacles (outlets) used with the POS equipment MUST be grounded at the main panel by a third wire interconnection of the ground terminal of each outlet. The third wire ground should be isolated from any metal members of the electrical system such as conduit, ducts and water pipes. Therefore, only isolated ground outlet receptacles (Hubbell Type, Plug #IG 8362OS) should be used for the POS system. Remote printers require a simplex type outlet and work stations a 2 or 4-plex type, depending on the number of outlets required at each electrical connection.

Windows Terminal	1 outlet	1 Cat 5/6 Cable
Apple/iPad Terminal	2 outlet	1 Cat 5/6 Cable
Apple/iPad Customer Display	2 outlet	1 Cat 5/6 Cable
Credit Card Device	1 outlet	1 Cat 5/6 Cable
Backoffice PC	3 outlets total (2+1)	1 Cat 5/6 Cable
Printer	single outlet	1 Cat 5/6 Cable

Hub	single outlet	
Firewall	single outlet	
Prep Video	2 outlets	1 Cat 5/6 Cable

Other Devices will require power, each configuration needs to be identified and requirements outlined and met. Example – Scales, Coin Changers, Customer Displays, integration devices, etc.

In most cases the power supply for the POS system should be installed from the main power distribution panel. A dedicated power distributor board should be mounted. If electrical interference is expected to be high, the power should be drawn from the building's main power supply.