



111-56-URM-004

TrueOrder™ KDS

Network Requirements

About this Guide

This document outlines the basic network requirements for the TrueOrder KDS. It lists the network port requirements and specifies conditions on the IP address used by the KDS devices adhering to digital security norms.

EPSON is a registered trademark and registered logomark of Seiko Epson Corporation. All other product and brand names are trademarks and/or registered trademarks of their respective companies. Epson disclaims any and all rights in these marks. Copyright 2025 Seiko Epson Corporation.

	TrueOrder™ KDS Network Requirements Page 1 of 5	111-56-URM-004 R3.40
--	-------------------------------------------------------	-------------------------

Table of Contents

1. Introduction	3
2. IP Configuration	3
2.1. Private IPv4 Address Requirement	3
3. Single Station	4
4. Multi Station	5
4.1. KDS Device Communication	5
4.2. Network Bandwidth Requirements	5
5. Port Requirements	5

1. Introduction

TrueOrder KDS can be either a Single Station configuration (1 screen) or Multi Station configuration (2 – 9 screens). A single station KDS device does not require a network for operation, although it does require network connectivity for configuration and connection from the POS. A multi station KDS setup requires that all the devices are connected on a Local Area Network. This document outlines the specific network requirements for TrueOrder KDS.

2. IP Configuration

TrueOrder KDS devices ship with DHCP enabled by default and the KDS is fully operational in DHCP mode. In Multi Station the devices recognize each other using the MAC address which is permanent and does not change. Even if DHCP IP leases renew and devices obtain a new/different IP address the KDS will continue to operate, and the devices will still communicate with each other.

It is generally recommended for KDS devices to be reconfigured to static IP as there are less issues with the POS losing connectivity to the devices.

If left in DHCP mode, the router/DHCP table should be configured such that the KDS devices re-acquire the same IP based on their MAC address.

2.1. Private IPv4 Address Requirement

Operation of the system is restricted to private IPv4 address ranges only, as defined by the IANA (Internet Assigned Numbers Authority). This rule applies to both Single Station and Multi Station setups. All devices on a KDS setup must have IP addresses in one of the following ranges. Any KDS device that obtains a public address shall temporarily cease operating, until a private IP address is restored.

Table 2.1: List of acceptable private IPv4 address ranges:

RFC1918 Name	Start address	End address
24-bit block	10.0.0.0	10.255.255.255
20-bit block	172.16.0.0	172.31.255.255
16-bit block	192.168.0.0	192.168.255.255

Link for RFC1918:

<https://tools.ietf.org/html/rfc1918>

EPSON	TrueOrder™ KDS Network Requirements Page 3 of 5	111-56-URM-004 R3.40
--------------	-------------------------------------------------------	-------------------------

Should a public IP be used with any KDS display, the order table view will be suspended, and the Status message “Need Private IP” will appear on screen:



Figure 2.1: KDS Display screen in suspended state due to public IP

3. Single Station

The Single Station KDS device requires network access for configuration. The network can also be used for operation and the basic requirement is that the KDS device is network accessible by the POS or wherever the print jobs are originating.

4. Multi Station

In the Multi Station KDS all devices communicate to the “POS Connected” (see Configurator -> Application Settings) aka Master KDS device. All devices must be able to communicate over a Local Area Network.

4.1. KDS Device Communication

KDS devices communicate using multicast with a 1 hop maximum. All devices must be on the same network segment with no routers in between.

4.2. Network Bandwidth Requirements

TrueOrder KDS requires that the internal LAN support sustained throughput of at least 512 Kbps. This ensures devices can adequately communicate with each other.

5. Port Requirements

The following is a general list of ports used by TrueOrder KDS. Not all ports are required for general operation – some are used solely for configuration, debugging/troubleshooting. It is recommended that all the following ports are left open:

Port	UDP/TCP	General Purpose
22	TCP	Troubleshooting and debugging.
80	TCP	Access to KDS web server. Configuration and troubleshooting.
123	UDP	NTP for multi station device time synchronization.
514	UDP/TCP	Troubleshooting and debugging.
3289	UDP	KDS Device Configuration
3290	UDP/TCP	KDS Device Configuration
3291	UDP	KDS Device Communication
3292	UDP	KDS Device Communication
9100	TCP	Print data port

EPSON	TrueOrder™ KDS Network Requirements Page 5 of 5	111-56-URM-004 R3.40
--------------	-------------------------------------------------------	-------------------------