



SendPro® C Lite, SendPro® C, SendPro®+, SendPro® C Auto Connectivity Guide

Introduction	2
Basic Installation Requirements	2
Power Outlet Requirements	2
Advanced Network Requirements	
Ports and Communication Requirements	4
URL Information	5
FAQs	9
Revision history	

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Introduction

The SendPro C Lite, SendPro C, SendPro+, SendPro C Auto is a new generation office shipping and mailing system from Pitney Bowes that uses a LAN or Wi-Fi connection versus an old-style analog phone line. Step-by-step instructions are included with your shipment so that your C-Series device will connect to Pitney Bowes during the installation process. If you have extensive network security restrictions at your site, you may need assistance from your IT or network specialist. In this case, refer to the *Advanced Network Requirements* section of this document for more information.

If you requested our Professional Service, your installation will be supported onsite by a trained Pitney Bowes professional.

Basic Installation Requirements

This device is designed to be an always-on device. In most cases, you connect your meter as described in the installation instructions included in the box. If you use the direct LAN connection, you just plug the network cable into the back of the SendPro C Lite, SendPro C, SendPro+, SendPro C Auto. If you use Wi-Fi, a wizard will take you through the procedure for setting up the Wi-Fi connection.

Your online connection provides you quick postage refills, automatic rate updates and access to additional Pitney Bowes support services. In addition to printing postage on outgoing mail, the SendPro C Lite, SendPro C, SendPro+, SendPro C Auto can connect you to your preferred carriers including USPS®, FedEx® and UPS®.

Power Outlet Requirements

The standard system requires a minimum of 1 electric outlet and up to 3 electric outlets depending on the options purchased.

- SendPro C Lite, SendPro C, SendPro+, SendPro C Auto meter (Envelope Printing only) one electric outlet for printing postage.
- SendPro C Lite, SendPro C, SendPro+, SendPro C Auto meter and label printer two electric outlets. One for printing postage and one for the shipping label printer.
- SendPro C Lite, SendPro C, SendPro+, SendPro C Auto meter, label printer, and laser (report)
 printer three electric outlets. One for printing postage, one for the shipping label printer, and one
 for printing reports.

Advanced Network Requirements

SendPro C Lite, SendPro C, SendPro+, SendPro C Auto initiates all communication (via HTTP or TLS), so it can safely sit behind most corporate firewalls

- · High-speed network connection.
- SendPro C Lite, SendPro C, SendPro+, SendPro C Auto supports 802.11n WiFi WPA, WPA-2 PSK, WPA-802.1x (LEAP) protocols.
- Due to security issues, WEP Wireless Security Protocol is not supported.
- Both 2.4 and 5 GHz frequency band wireless is supported.
- SendPro C Lite, SendPro C, SendPro+, SendPro C Auto communicates to external web services via HTTP over Port 80.
- SendPro C Lite, SendPro C, SendPro+, SendPro C Auto communicates to PB secure server(s) via TLS over port 443.
- SendPro C Lite, SendPro C, SendPro+, SendPro C Auto uses Port 53 for DNS lookup.
- Pitney Bowes requires a minimum network bandwidth of 384 kbps (upstream and downstream) to operate, but we recommend 1 Mbit/sec for best performance.
- Pitney Bowes recommends that DSL or cellular devices are not shared across multiple SendPro C Lite, SendPro C, SendPro+, SendPro C Auto systems.
- Customer owned web filtering devices or software, as well as SSL packet inspection should be disabled for these ports as they can affect performance or could prevent functionality.
- SendPro C Lite, SendPro C, SendPro+, SendPro C Auto internal base and tablet communication
 uses a subnet that consists of IPs from the 192.168.10.240 to 192.168.10.255 and 192.168.10.96
 to 192.168.10.111 ranges. When the SendPro C Lite, SendPro C, SendPro+, SendPro C Auto is
 connected to a network that has a default gateway which uses any address in these ranges, the
 SendPro C Lite, SendPro C, SendPro+, SendPro C Auto will not be able to communicate on the
 network because messages can not be routed properly.
- Wireless Routers that support IPv6 are supported if IPv6 has been properly configured. Recently, ISPs are remotely activating IPv6 as a feature, but are not yet fully supporting the protocol. This can cause the display to repeatedly reboot once the Wi-Fi connection is established. Please ensure your network is not configured this way.

Ports and Communication Requirements

The SendPro C Lite, SendPro C, SendPro+, SendPro C Auto connection uses these ports and protocols. The system will require access through your network and firewall.

Communications

- All communication is initiated from the system via ports 80 (HTTP) and 443 (TLS).
- All communications from the system to the back end system are in the form of XML messages.

Ports

Port 80 (HTTP)

- · Web Services.
- TeamViewer (remote access software).

Port 443 (TLS)

- SendPro C Lite, SendPro C, SendPro+, SendPro C Auto sends requests to refill or audit its PSD
 (Postal Security Device) when the user requests it or an inspection is required. Audits occur if the
 PSD inspection date has expired.
- On PSD replacement the system will automatically request the configuration data for the replacement PSD.
- Transaction records from the SendPro C Lite, SendPro C, SendPro+, SendPro C Auto are automatically uploaded when a user message appears (within three days of the mail being generated).
- O/S updates and PB Application Software and Rates Data updates.

Port 53

· DNS lookup.

IMPORTANT:

If your IT department uses a rules-based method for allowing specific ports to pass traffic on their network for port 53, you must allow both UDP and TCP traffic to this port.

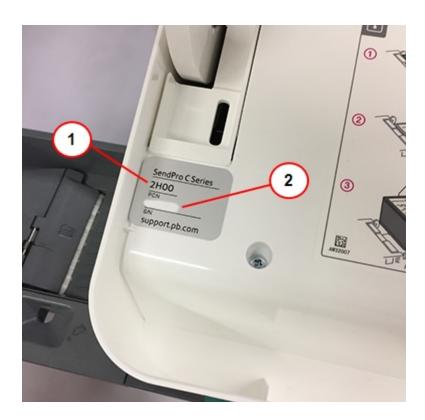
URL Information

The URL hostnames must be accessible from the device, without any obstructions. This includes being free of any SSL packet inspection, web filtering devices or software monitoring. Unless indicated otherwise, these URLs apply to SendPro C Lite, SendPro C, SendPro+, SendPro C Auto.

- The SendPro C has certain URLs it must connect to for its basic operation. These are listed under "Required URLs".
- There are further URLs the device will attempt to connect to that are for optional features. While
 we recommend you allow the machine to connect to these optional URLs, they can be blocked if
 necessary. These are listed under "Recommended URLs".
- Finally, this device uses an Android operating system. The Android operating system may attempt to connect to URLs the SendPro C Lite, SendPro C, SendPro+, SendPro C Auto does not use at all. If you notice the system attempting to access a URL not listed in this document, it is OK to block it on your firewall.

An example of an unneeded URL: mobile-gtalk.l.google.com (Port 5228)

To locate the (1)Product Code Number (PCN) and the (2)7-digit serial number, check the label on the rear of the meter or under the display cover as shown here. Note that the serial number is blurred out here for security reasons.



Required URLs

- Distributor main PB Server that authenticates machine for access to other PB web services
 https://distservp1.pb.com (Port 443)
- Funds (Funds Management & Refills) funds are managed through a separate Funds Server
 https://cometservp1.pb.com (Port 443)
- Rates and Updates (Download Services) Downloads new software, graphics, rate prices
 - Main Download Services entry
 - https://dlsdlp1.pb.com (Port 443)
 - File Processing
 - https://pbdlsp1.pb.com (Port 443)
 - https://pbdlsp1t.pb.com (Port 443)
 - https://pbdlsp1k.pb.com (Port 443)
 - https://dlsdlp1b.pb.com (Port 443)
 - https://dlsdlp1z.pb.com (Port 443)
 - OS Updates
 - https://pb-ota.redbend.com (Port 443)
- Manage Accounts (Accounting) separate PB Server that manages accounting including account creation, reports etc.
 - Accounting Web Application: https://ms1app.pb.com/ (Port 443)
- Health Data Update machine health Information upload
 - https://*.amazonaws.com (Port 443)
- Network Connectivity Test Site used by tablet's Android O/S to confirm connectivity
 - http://connectivitycheck.gstatic.com (Port 80)
- PB Web Services Support used by several PB applications including Shipping
 - https://api.pitneybowes.com (Port 443)
 - https://pitneybowes.okta.com (Port 443)
 - http://microsoft.com (Port 80)

Recommended URLs

We recommend these URLs are left open, but if this presents a security issue, they can remain blocked. They are enabled by default.

- Postal Advisor (PB hosted site) utility website that offers helpful hints on postal regulations
 - http://www.pb.com/postal advisor (Port 80)
- Universal Tracking (PB partner hosted site) carrier independent web tracking site for packages
 - http://www.pb.boxoh.com/ (Port 80)
- USPS Mobile convenient link to USPS mobile website
 - https://m.usps.com/m/Home (Port 443)

- Trackable Labels (PB hosted shipping site) Shipping Trackable Labels Web Services Support
 - https://foundation.sending.us.pitneybowes.com (Port 443)
 - https://shipping.sending.us.pitneybowes.com (Port 443)
 - https://sendpro.us.pitneybowes.com (Port 443)
 - https://sendpro.pitneybowes.com (Port 443)
 - https://integration.sending.us.pitneybowes.com (Port 443)
 - https://locations.sendpro.pitneybowes.com (Port 443)
 - https://uam.sendpro.pitneybowes.com (Port 443)

• Device Management

- https://smb.pitneybowes.com (Port 443)
- https://prov.mdm.pitneybowes.com (Port 443)
- https://api.mdm.pitneybowes.com (Port 443)
- https://tokx.mdm.pitneybowes.com (Port 443)
- https://cn997.awmdm.com (Port 443)
- https://ds997.awmdm.com (Port 443)
- https://play.google.com (Port 443)
- https://gate.hockeyapp.net (Port 443)
- https://e.crashlytics.com (Port 443)
- https://android.googleapis.com (Port 443)

• Device Help - On-device help information

- https://support.pitneybowes.com (Port 443)
- https://pitneybowes.com (Port 443)
- https://youtube.com (Port 443)
- https://play.vidyard.com (Port 443)
- https://crashlytics.com (Port 443)
- https://s3-us-west-2.amazonaws.com (Port 443)
- https://s3-us-east-1.amazonaws.com (Port 443)
- https://smb-apps-content.s3.amazonaws.com (Port 443)
- https://sendprocare-app-public.s3.amazonaws.com (Port 443)
- https://d9qjxq1oiycct.cloudfront.net (Port 443)
- https://d2sbh6dpxtmh7p.cloudfront.net (Port 443)
- https://cdn.sendprocare.pitneycloud.com (Port 443)
- https://cdn.freshbots.ai (Port 443)
- https://smb-care-bot.s3.amazonaws.com (Port 443)
- https://dp6ia2h50k4c.cloudfront.net (Port 443)

Support Remote Access

TeamViewer is an application that lets Pitney Bowes Service access your device remotely, when you authorize it. (A TeamViewer session can only be initiated by someone on your end, therefore the system cannot be accessed without your knowledge.)

There are two ways to unblock TeamViewer:

- General unblocking of Port 5938 TCP for outgoing connections (recommended). Port 5938 is only used by a few applications and therefore there is no security risk. This traffic should be filtered or cached.
- Unblocking URLs of the following formats (to any server) GET:
 - /din.aspx?s=...&client=DynGate...GET
 - /dout.aspx?s=...&client=DynGate...POST
 - o /dout.aspx?s=...&client=DynGate...

Note:

Regardless of which method you choose to unblock TeamViewer, verify there are no content filters or anything similar blocking one of these URLs:

- *.TeamViewer.com
- *.dyngate.com

FAQs

Question	Answer
What OS does this device run?	For SendPro C200, SendPro C300, SendPro C400 (Product Code Number: 1H00 and 2H00): Android 6.1 SendPro C Lite, SendPro C, SendPro+, SendPro C Auto (Product Code Number: 7H00, 8H00, 9H00): Android 7.0
How are updates to the Android Operating System performed?	PB uses a 3rd party Over The Air (OTA) tool that securely downloads updates to registered machines.
Why are both ports 80 and 443 in use? Please detail what information is being sent over port 80 and if it is required	ALL critical funds related or core mailing and shipping services only use port 443. Some of the non-critical services use port 80 (examples: online read-only Help System content, or non-PB sites for tracking services site)
What controls are in place to protect this device against network-based malware threats?	White list of URLs TLS Only executes services needed to perform activities OS distribution has been optimized and locked down
What information is being sent and presumably stored at Pitney Bowes?	PB collects postal usage data that is required for USPS reporting. This includes items such as Class of Mail, Weight, use of special service fees, mailing date etc. No Personal Identifiable Information (PII) is collected or used. We also collect machine health information such as Software version numbers, errors reported etc.
If information is being stored, how is it being stored? Please describe the protections in place.	Postal usage information is stored in a special application and database, which is reviewed by SendPro C Lite, SendPro C, SendPro+, SendPro C Auto prior to our Postage Meter Approval. Machine Health information is stored in Amazon Web Services, but is uploaded through a TLS connection and authenticated using machine resident credentials. Again, no PII information is collected or stored there.
Does it have a firewall?	No
Who controls the firewall rules?	Not applicable
How are the firewall rules configured?	Allow only the ports Http, TLS and DNS

Question	Answer
What is the security patch process?	SendPro C Lite, SendPro C, SendPro+, SendPro C Auto security patches are applied by emergency updates via PB only, and on a regular schedule through PB services.
What is the software update process, and how often does this occur?	As required with periodic feature additions and bug fixes
 What is the network traffic flow to and from the SendPro C-Series system? What firewall rules need to be in place to allow the necessary communication? 	 Outgoing contact initiated (no push) utilizing TLS, URLs provided by PB services Outgoing - transactional data Incoming is both transactional data and files and Web Services
Can you identify suspicious activity affecting SendPro C Lite, SendPro C, SendPro+, SendPro C Auto?	Yes. An audit process exists to validate the financial integrity of the system. Error logs are available and can be uploaded to the PB data center.
What are the access controls in place to secure SendPro C Lite, SendPro C, SendPro+, SendPro C Auto?	The application access is managed by the customer using an access code. The system operates in a Kiosk mode where access to the underlying Android operating system is prevented.
How do you authenticate an individual or a service ?	Tracking Labels "Shipping" application access is managed by the customer using User IDs and passwords to authenticate.
Are there audit trails in place?	Yes. PSD transactional audits, extensive logs and all financial transactions are audited by the PB infrastructure. SendPro C Lite, SendPro C, SendPro+, SendPro C Auto logs all error conditions, and maintains ink usage logs, print usage logs, etc.
Is data stored on the device?	Yes. SendPro C Lite, SendPro C, SendPro+, SendPro C Auto stores transactional data, graphic images, customer profiles and settings, files (rates, etc.). Transactional usage data is uploaded and then deleted when confirmed upon receipt by PB Infrastructure over TLS channel.
What controls protect the data?	All files and data interface utilizing TLS. Incoming data and files are signed and verified prior to use. If consumed by the printer, it is verified on each use. If used by the application, it is verified on load.

Question	Answer
Does the SendPro C Lite, SendPro C, SendPro+, SendPro C Auto allow remote administration?	Pitney Bowes will use TeamViewer to troubleshoot system problems remotely. The end user will initiate the session using a special session code which is generated by the TeamViewer application and changes each session.
Is TeamViewer required?	No, it is not required, but it is recommended. It is configured to not run until the end user activates it with a special one-time session code . The session code changes for each system and each activation. The special session code is provided by the call center to the end user, once they have called the center and provided specific information that also changes for the session.

Revision history

Document Part Number	Release Date	Comments
SV63189 Rev. A	August 2017	Initial release
SV63189 Rev. B	December 2017	Added WiFi characteristics
SV63189 Rev. C	January 2018	
SV63189 Rev. D	April 2018	Added Proxy setup
SV63189 Rev. E	April 2018	Updated URLs
SV63189 Ref. F	April 2018	
SV63189 Rev. G	August 2018	
SV63189 Rev. H	August 2018	
SV63189 Rev. J	October 2018	Engineering draft
SV63189 Rev. K	October 2018	
SV63189 Rev. L.2	December 2019	
SV63189 Rev. L.3	September 2020	Edited "IMPORTANT" note in Ports and Communication Requirements for clarity