

## Frequently Asked Questions Regarding the Purchase of PLS Software

### 1) What does my purchase include?

Your purchase includes a CD with the software, manual and hardware key if necessary. Licenses 1 through 8 also include one year of technical support and one year of upgrades. Technical support must be purchased separately when more than 8 licenses are involved. A year of technical support and upgrades typically costs 13-15% of the current cost of all installed licenses. Technical support is provided by phone or email with email being the preferred method especially for international clients. Upgrades are delivered exclusively via the Internet. You must be able to download 25MB files via FTP or HTTP in order to receive upgrades. Shipping of the initial order is included to all destinations in the US and for all international orders of US\$4,000 or more. For international orders of less than US\$4,000, an additional shipping fee of US\$100 will be charged unless the order can be filled completely electronically.

### 2) Which programs use a hardware key?

PLS-CADD<sup>®</sup>, PLS-POLE<sup>®</sup>, SAPS<sup>®</sup> and TOWER<sup>®</sup> require a hardware key. SAGSEC<sup>®</sup> and CAISSON<sup>®</sup> do not require a key.

### 3) Can the software be installed on a network?

Yes, the software may be installed on a network file server so that only a single version needs to be installed, upgraded and backed up. However, for programs that require a key the key must be attached to the workstation executing the software. For programs that do not require a key, it is your responsibility to ensure that no more than the licensed number of copies of the software execute concurrently.

### 4) Can I run the software under Citrix Metaframe<sup>®</sup> or Windows Terminal Services<sup>®</sup>?

No, due to the processor intensive and graphically demanding nature of our products they are not compatible with the use of terminal server software.

### 5) What types of hardware keys are available?

USB hardware keys are available. The parallel port key has been discontinued. Note that each USB key requires a free USB port (they cannot be piggybacked). Only USB hardware keys are supported on x64 editions of Windows.

### 6) Can I run more than one program from the same hardware key?

Yes, we can place any combination of licenses onto a single key. For example, if you purchased PLS-CADD<sup>®</sup>, TOWER<sup>®</sup> and PLS-POLE/STEEL<sup>®</sup> we could give you one key that enables all three programs, three separate keys that each enable only one of the programs or any combination of the two.

## 7) What does technical support include?

Technical support includes assistance installing the software and making it run on your system. It also includes verifying that the software functions correctly and fixing it in the event that it does not. Advanced questions regarding the capabilities of the software are included.

## 8) What doesn't technical support include?

Technical support does not include answering basic questions that are addressed in the manual, building models for you, interpretation of design codes or training in the use of the software. Training is strongly recommended; see below for training information.

## 9) How should I obtain technical support?

In the event you require technical support following this procedure will minimize the amount of time it takes you to get an answer:

- 1) Technical support questions should be addressed in email to [support@powline.com](mailto:support@powline.com). This allows for the question to be routed to the person most qualified to answer it.
- 2) If your question involves an error message from the program or a question about a specific model then submit the model with your question. To do this you should make a backup file of the model using the *File/Backup* command. If the resulting backup file is small (less than 6MB) you can attach it to your email message; otherwise, you should check the "Transmit file to PLS for technical support" option provided in the Backup Options dialog displayed during the *File/Backup* process to have the file automatically sent to our server. If that does not work, you may use our online file transfer service at <http://www.powline.com/cgi-bin/upload.php>
- 3) If you are reporting a suspected bug then include detailed instructions on how to reproduce it ("first go to *Structure/Modify* then ..."). The more detailed your instructions are the faster we can answer your question. Your effort doing this will not be wasted since we fix more than 90% of reproducible problems the same day they are reported.

The majority of questions that cannot be answered on the first exchange of email are due to the omission of a backup file or a lack of specificity in describing the issue. This needlessly wastes everyone's time.

- 4) If your question concerns the validity of a calculation then include what you believe the correct answer is as well as your hand calculations or other supporting material. Also copy and paste the program output as well as whatever input was required to generate that output into your email message. During the process of hand calculating a result, most clients convince themselves that the program generated result is correct (albeit sometimes surprising) or find an input error.

## **10) Do I need training to use this software?**

We recommend three days of basic and two days of advanced training for users of PLS-CADD<sup>®</sup>. PLS-CADD is a large and comprehensive program covering the full gamut of terrain modeling, structural analysis, sag-tension and plan & profile sheet generation. Training will enable you to maximize your investment in the software. Users of TOWER<sup>®</sup> and PLS-POLE<sup>®</sup> may benefit from a single day of training, but if you are familiar with structural analysis or have used other structural analysis software it may not be necessary. Training is not generally required for users of SAGSEC<sup>®</sup> and CAISSON<sup>®</sup>.

## **11) Are there regularly scheduled training classes offered?**

Yes, please see our web site at <http://www.powline.com/news.html#training> for details.

## **12) How do I renew my technical support and upgrade period?**

Your technical support and upgrade period starts the day you purchase the software and extends for one year. As you near the end of this period, the software will remind you to contact us for a quote to renew support and upgrades for another year. You are not required to do this and the software will function normally after your period expires, but you will not receive updates or technical support until you renew.

Regardless of when you renew your technical support and upgrade period, this period will always start and end on the anniversary date of when you purchased the software. For example, if you purchased the software on July 15, 2010 then your initial technical support and upgrade period would last through July 15, 2011. If you then renewed on July 16, 2010 or even waited to renew until July 14, 2011 the support period would be extended until July 15, 2012. In the event you could not renew until more than one year after expiration (say August 1, 2012 in our example) then the cost to renew will increase proportionally and the renewal date will be set to the next anniversary date (in our example the renewal date would be July 15, 2013 and the cost would double). This policy accounts for all of the work spent improving the software since the last renewal. Therefore, there is no possible advantage to delaying renewal. There is only the disadvantage of not having access to technical support during the period where the software was not renewed.

If a renewal date other than your purchase anniversary date would work better with your budget cycle or if you would like to get all of your PLS software onto a common renewal date you may contact Power Line Systems to obtain a pro-rated quote for any date you choose.

## **13) How do I obtain upgrades?**

Upgrades may be downloaded directly from within the software using the *Help/Download Upgrade* command built into the software. You must request an upgrade in order to receive it; they are not sent unsolicited. We announce the current shipping versions periodically in our email newsletter and also list them at <http://www.powline.com/current.html>. You may subscribe to the newsletter at <http://www.powline.com/forms/plsemail.html>.

## **14) What are the payment terms?**

International customers must pay in advance. Customers from Australia/New Zealand should consult with our local representative Dulhunty Industries. U.S. utilities may send us a signed purchase order and pay the full amount within 30 days.

## 15) What discounts are available?

The only discounts offered are for multiple licenses of the same program:

License Number	Discount
1	Full price (no discount)
2-5	30% off of full price
6+	50% off of full price

For example, purchasing two licenses would cost 1.7 times the cost of one license (full price for license #1 plus 70% of full price for license #2).

We operate as a mail order company and charge the same price throughout the world.

The multiple license discounts are only available for licenses owned by one company in a single country. Regional offices in different countries are treated as separate companies since they require separate shipping and technical support. Licenses cannot be resold without the written approval of Power Line Systems. At nine or more licenses, technical support must be purchased separately for all licenses of that product.

Clients who take advantage of the 50% discount level must nominate a single point of contact for technical support and upgrades. This contact person will be the conduit for all technical support queries and will be responsible for redistributing any upgrades within the organization.

## 16) What versions of Microsoft Windows® does the software support?

The software will run on the 32 bit and x64 editions of Windows XP, Vista and Windows 7. Server versions of Windows (for example Windows Enterprise Server 2003) are supported as file servers, but not for interactive execution from the console or remotely. Windows 2000 support has been depreciated and will likely be dropped altogether in 2010.

Windows Vista support starts with version 8.10 of our software. Please see <http://www.powline.com/products/vista.html> for more information about running PLS software on Windows Vista. Windows 7 support starts with version 10.20.

We strongly encourage the use of an x64 edition of Windows (ideally Windows 7 x64). Please see Question # 17 for information regarding the new x64 edition of our software.

## 17A) Is there an x64 edition of the software available?

Starting with version 9.3, PLS-CADD, PLS-POLE and TOWER are available in a native x64 edition in addition to the standard 32 bit edition. The x64 edition has the same features and saves in the same file formats as the 32 bit edition. Both Editions will always be shipped and installed. However, on an x64 edition of Windows, the setup program will create shortcuts to the 64 bit edition instead of the 32 bit edition. You may distinguish between the 32 bit and x64 edition by the suffix "64" on the executable (for example, "tower64.exe" is the x64 edition of TOWER and "tower.exe" is the 32 bit edition).

## 17B) Are files saved in the x64 edition compatible with the 32 bit Edition?

The file formats are the same; however, it is possible to use the x64 edition to create a PLS-CADD project that is so large that it will give an "out of memory" error when you attempt to use the 32 bit edition to open it. TOWER and PLS-POLE models are always compatible across editions.

## 18) What are the recommended hardware configurations?

The software will run on any computer capable of running the Windows versions listed above; however, to obtain good performance we have the following recommended minimum hardware configurations:

### **SAGSEC<sup>®</sup>, CAISSON<sup>®</sup>, PLS-CADD/LITE<sup>®</sup>:**

256MB of RAM

No specific processor requirements

### **PLS-POLE<sup>®</sup>, TOWER<sup>®</sup>, SAPS<sup>®</sup>:**

512-1024 MB of RAM

Core 2, Phenom, Core i5 or better processor

These applications take advantage of multi-core/multi-processor computers and will execute a nonlinear analysis **as many times faster as you have cores**. For example, a quad core computer will run an analysis ~4x faster than a single core. For this reason we strongly recommend multi-core computers.

### **PLS-CADD<sup>®</sup>:**

- **Conventional ground survey projects:**

512MB of RAM

Core 2, Phenom, Core i5 or better processor

- **LIDAR, Digitizing, Aerial Imagery or SAPS Finite Element Sag-Tension:**

2-48GB of RAM

Core 2, Phenom, Core i5 or better processor

PLS-CADD can only use more than 2GB of RAM when running on x64 editions of Windows and can only use more than 4GB of RAM with the x64 edition of PLS-CADD.

PLS-CADD makes some use of additional processor cores when available and future versions will extend this capability.

### Notes:

1. You should allow 35MB of disk space for each program. User data may require tens of gigabytes of disk space for some PLS-CADD projects that involve aerial imagery or LIDAR derived data.
2. One or preferably two large monitors (17"+) with at least XGA resolution will improve your experience.
3. PLS-CADD does not use 3D hardware accelerated video, so all that is needed is a fast 2D video card (motherboard integrated graphics with shared memory are very slow, a separate card is recommended).
4. Due to their small cache, lower bus speeds and the resulting poor performance we discourage the use of Celeron<sup>®</sup> processors.
5. Intel Xeon<sup>®</sup> and AMD Opteron<sup>®</sup> processors are supported.

6. PLS-CADD benefits substantially from RAID 0 (striping) when working with LIDAR or aerial imagery. Likewise, working with these projects across a network can have a negative impact on performance.
7. The Hyper-Threading feature available with some Intel Pentium 4<sup>®</sup> and Xeon<sup>®</sup> processors does not improve the performance of PLS software and in fact degrades performance by 8-14% in our tests. We recommend you disable Hyper-Threading in the system BIOS for these processors. Hyper-Threading should not be confused with dual core or dual processor systems which do improve the performance of our software. Hyper-threading on Atom<sup>®</sup> or Core i7<sup>®</sup> based systems does not provide any benefit, but also does no harm and therefore does not need to be disabled in the system BIOS.
8. Only USB hardware keys can be used with x64 editions of Windows.

**19) I have budgeted \$N,NNN for a new computer. How should I spend it in order to obtain the best performance?**

Please follow these steps which assume you start with a basic configuration and then continue improving it until your budget is exhausted.

1. Obtain the recommended amount of RAM listed for your application in #18 above. Note that the fastest processor in the world will not do you any good if it does not have enough memory.
2. TOWER and PLS-POLE : Upgrade to a quad core processor.
3. Increase system memory to the maximum recommended amount of RAM from #18 above.
4. Increase the clock rate of your processor to the fastest available.
5. TOWER and PLS-POLE: add a second quad core processor (total of eight cores) to nearly halve the amount of time a nonlinear analysis of multiple load cases takes.
6. PLS-CADD: If you will store your projects locally on the machine (not on the network) then add a RAID 0 hard drive controller with two fast (10,000 RPM) disks.