

# nanoCAD Plus and nanoCAD Pro – Smart Design & Drafting

## Why nanoCAD Plus?

### DWG format – native support

The nanoCAD platform supports all active versions of the DWG format – the world's most popular CAD format: from DOS R11 to DWG 2018. This means that nanoCAD directly opens and saves files in this format without loss of data and can be integrated with any external software that support this format. In addition, nanoCAD supports the technologies formed around this format: the model sheet technologies, object styles (sizes, texts, etc.), DWG service utilities (purge, audit, recover), static/dynamic blocks, etc.

### API Compatibility

nanoCAD is not only a drawing tool, but a platform on the basis of which you can create your own application, extending its standard features. Using these applications allows you to integrate calculations, to automate designing activities, to integrate with external data bases and third-party solutions. In terms of its API interface, nanoCAD is very close to traditional CAD systems and supports such languages as C, C++, C#, COM-interface, Active X, script languages: LISP, Visual Basic Script, Java Script.

### Join nanoCAD Developer Club!

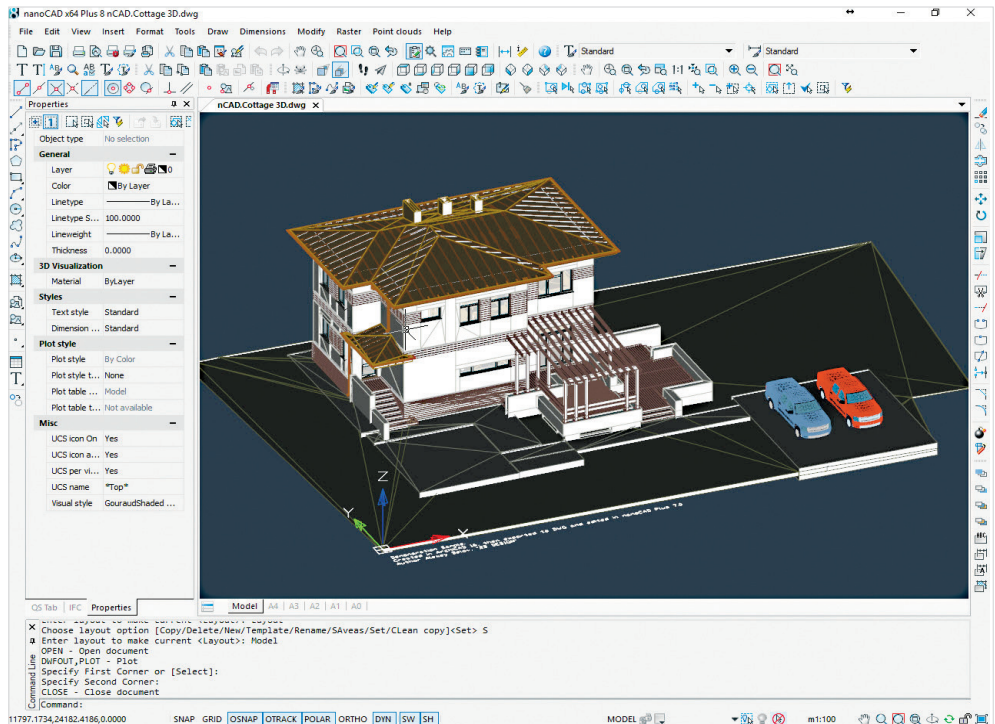
[Developer.nanocad.com](http://Developer.nanocad.com) – Developer Club, free membership  
[Free Access to dev lic, bug tracker, SDK](#)

### Interface

nanoCAD features a conventional CAD interface. The well-known arrangement of icons, menu items, command names and their options allows user to start working with this product in 1–2 days. This means that its users can quickly get into the swing of things, starting to work with the platform, and the managers can easily find professionals, without additional costs for their training and long-term introduction. At the same time, users will find a huge amount of usual interface techniques: dynamic input, command options, object tracking, links, viewports, viewport controls, ribbon and classic interface, etc.

### Tools

The main functionality of the nanoCAD platform is developing and issuing design documentation. Therefore, you will find in nanoCAD a full set of tools that allows the user to draw, model, edit, and publish various documents (drawings, tables, models, texts, etc.). nanoCAD is not tied to any subject field, so you can create any types of docu-



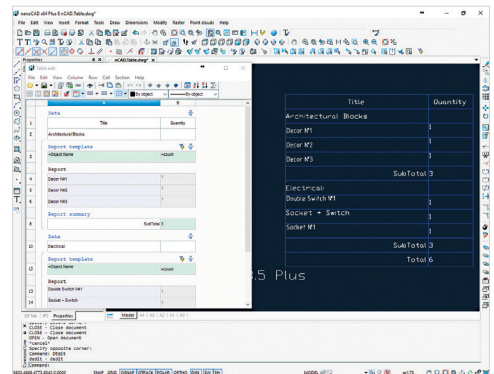
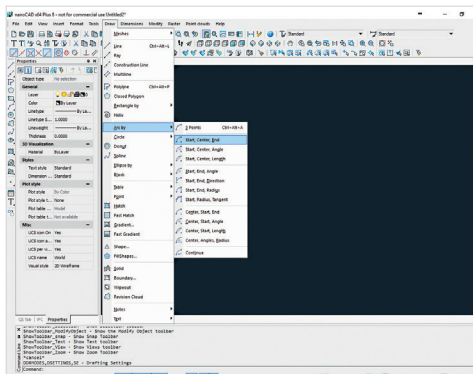
ments for any sector: mechanical engineering, oil & gas, construction, land management, telecom, education and private use.

### Unique Features

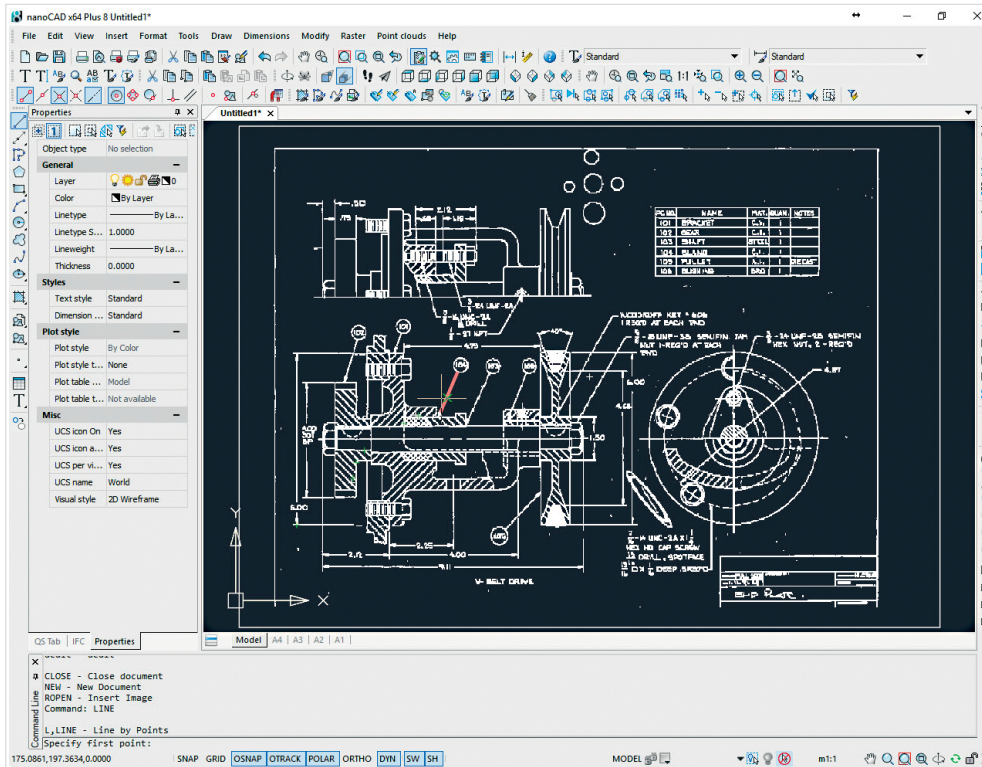
**Rasters** – In the nanoCAD platform, raster objects are full-fledged entities of the drawing process. This means that when preparing a drawing, you can snap to end points, intersections, centers of raster primitives (lines, arcs, circles) as usual vector objects. Due to such a simple tool as an eraser, you can instantly and simply add old drawings, documents, standard solutions into your work. nanoCAD does separate rasters as if these are multiple copies of the same one. Raster Menu

when extracted shows a bunch of multiple commands, i.e. 4 Point Correction – an ability to edit an image if it wasn't scanned properly. As raster objects, in addition to JPG, TIF, BMP, PNG, you can also use any types of vector or raster PDF.

**Table Editor** – The nanoCAD platform features a unique, Excel-style table editor. You can use it both as a tool to generate tables manually and to build automatically updated table reports based on data from a DWG drawing. Such tables can also contain formulas, obtain data from external sources, upload data to popular formats (xls, txt, csv, etc.) This is an ideal tool for creating Bill of Materials (BOM).



Combining various 3D data (3D DWG, BIM-models, Point Clouds) in consolidated 3D scenes, nanoCAD provides a convenient WASD Navigation through a model.



## Why nanoCAD Pro?

nanoCAD Pro is a more advanced version of nanoCAD Plus upgraded with Inventor-style tools for 3D solid modeling and 2D constraints.

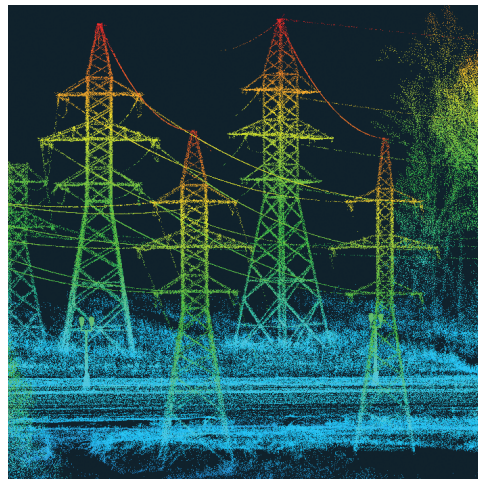
### 3D Solid Modeling

The main task of this module is enhancing the standard functionality of the nanoCAD platform with traditional solid modeling functions. Using tools of stamping, rotation, pulling and building transitions, the user can form complicated 3D scenes and build a 3D model building log tree. Using the 3D section function, you can obtain automatically updated 2D views, thus linking models to 2D documents.

### 2D Constraints

The module allows for adding various types of constraints on 2D drawings: a fixed distance, parallel, perpendicular, and axial alignment, etc. Any constraint can be transformed in a parameter and be a member of formulas determining the drawing geometry. This allows for creating parametric drawings, controlled by the user through the key parameters. In combination with the 3D module, you can simultaneously carry out modern parametric 3D modeling, significantly speeding up your work.

**Point Cloud** – nanoCAD can be used as a viewer of laser scanning images, directly importing 3D points data from LAS, BIN, PTS, PTX, PCD, XYZ formats. In this case, nanoCAD can work with extremely large point clouds (1 billion points and more), gives access to point metadata, and approach a points cloud as a standard vector object. This means that you can change insert points, scale, mirror 3D scenes, embedding them in 3D models, and also make arbitrary sections on them.



**IFC (OpenBIM)** – IFC is an open format for exchanging information models (BIM data). The nanoCAD platform allows for importing IFC data in a DWG environment, forming consolidated BIM models. In this case, the user can select any IFC object and get access to information in the standard Properties window. The nanoCAD platform combines the modern BIM technology with a traditional DWG CAD.

**3D Navigation** – Combining various 3D data (3D DWG, BIM-models, Point Clouds) in consolidated 3D scenes, nanoCAD provides a convenient WASD Navigation through a model.

**Large 3D Models** – One of the key areas for the nanoCAD platform development is working with large 3D models. That is why, in the recent versions, we began to use the functions of multi-threaded computing, which increased the nanoCAD performance by 20–30%.

**Permanent Licensing** – When developing nanoCAD, we try to take into account the interests of all types of users. That is why we have a very flexible approach to licensing, and to date, we offer to purchase any type of license. In our price list, you will find both temporary and permanent licenses, including when purchasing a three-year subscription, a user is able to obtain a permanent license free of charge.

**Dynamic development process** – The nanoCAD platform is one of the fastest evolving CAD systems. Working in close cooperation with our users, we constantly enhance our product with useful and necessary functions.

