



atvise® embedded

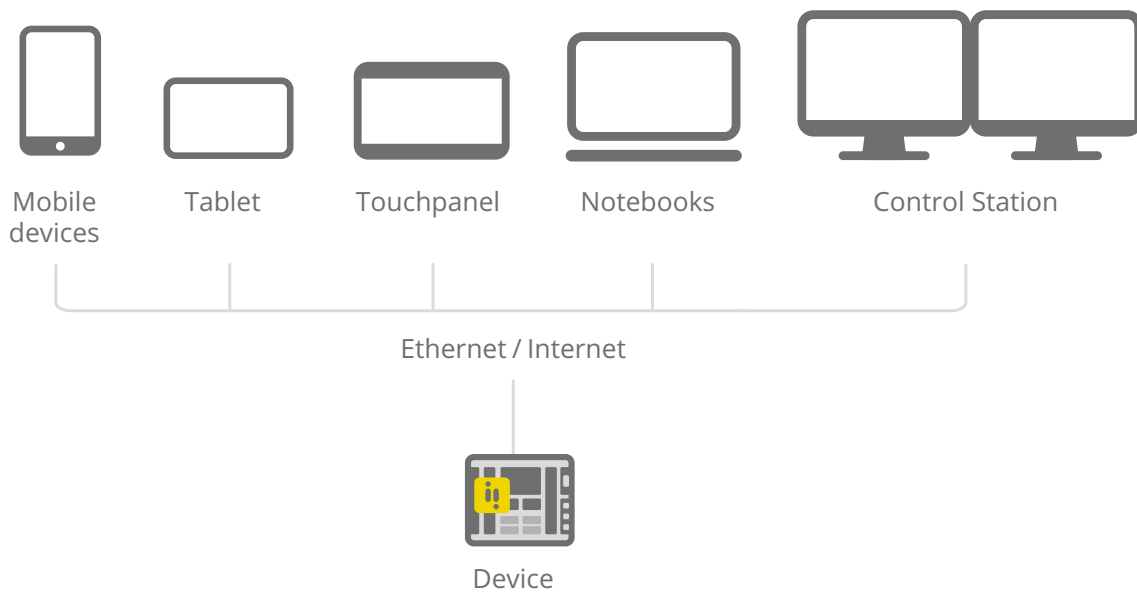
Right in the middle instead of on the sidelines

Web server as a basis

The basis of atvise® embedded is a lean web server. It has all the necessary interfaces to access process data, alarms and historical data. The atvise® embedded guidelines we provide make it possible to quickly and easily define sources for the interfaces to display data. Once the interfaces have been defined, the atvise® embedded server is ready and graphically supported engineering of the web HMI can begin.

Extensive modular system

With a wide range of prepared graphic objects, many available dynamizations and responsive-design support, atvise® embedded offers everything needed for the fast and efficient implementation of a web-capable HMI. Once created, a project can be quickly and easily transferred to the atvise® embedded server via our engineering tool. This can happen during operation, without the need to restart the runtime environment at all.





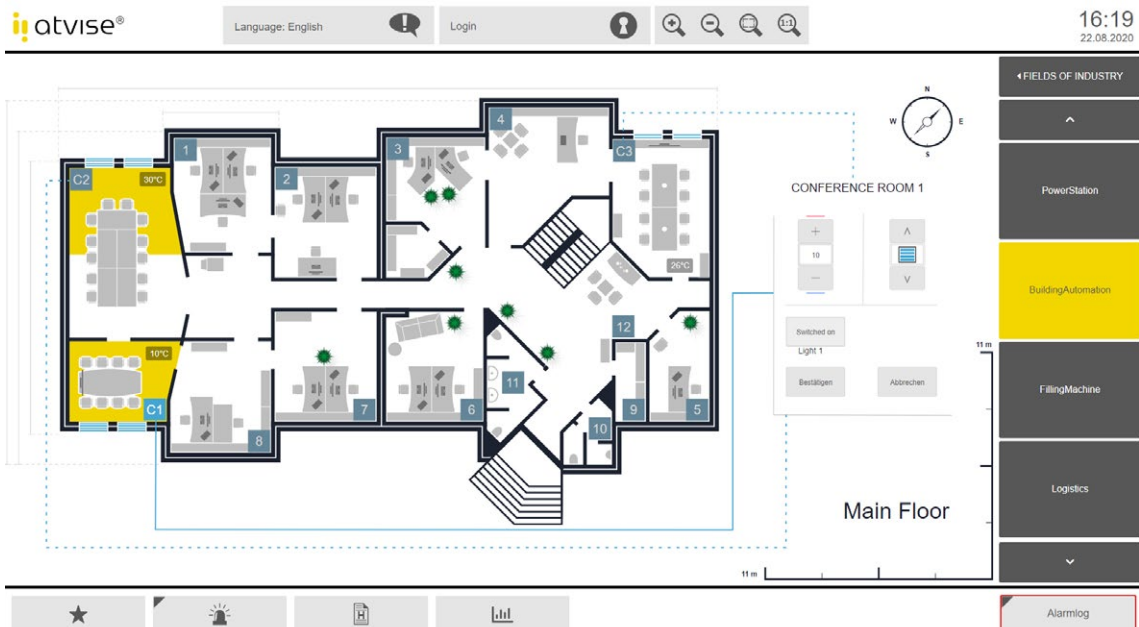
Intelligent engineering functions

With the atvise builder as an engineering tool, users of atvise® embedded have a wide range of intelligent functions at their disposal.

Graphic objects can be developed in a consistent modular and object-oriented manner. In this way, individual, simple sub-components can be combined to form extensive and complex components. Configurable parameters of higher-level graphic components can be passed on to the sub-components contained together with graphic support.

The interaction logic of individual graphic objects can also be mapped in a modularised way to further increase engineering efficiency. In this way, several graphic objects can use the same logic module.

A change to the logic module has an immediate effect on all referenced graphic objects.



| atvise® embedded | |
|--------------------------|-------------------------------------------------------------------------------------------------------------------|
| Server | |
| Installation | A fully implemented application must be compiled for the platform of the target device and subsequently installed |
| Parallel operation | Yes, several visualizations can be operated on different TCP ports |
| Sampling interval | Depends on the atvise® embedded implementation |
| Access security/Security | Yes (user and group administration, HTTPS with SSL encryption) |
| Server timestamping | Depends on the atvise® embedded implementation |
| Alarm system | Not included |
| Historisation | Not included |
| User administration | Yes, your own visualization users with rights and groups |
| Functional extensions | Depends on the atvise® embedded implementation |



| atvise® embedded | |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Client | |
| Installation | No installation necessary |
| Web browser ¹⁾ | <ul style="list-style-type: none"> • Chrome • Chromium • Firefox ESR • Firefox • Microsoft Edge • Safari Mobile |
| Process images technology | HTML, SVG, JavaScript |
| Number of clients | Depends on the atvise® embedded implementation |
| Zooming | Yes, continuous without loss of quality |
| Scaling | Yes (automatic adaptation of the resolution to the target device without additional engineering effort) |
| Vector graphics | Yes, all components of the visualization are based on SVG |
| Trend | Yes |
| Operation | Mouse or other pointing device Keyboard (hotkeys configurable) Touchscreen, Multitouch ²⁾ |
| Multilingual | Yes (online) |
| Font selection | Yes (online) |
| Character sets | Any (including Asiatic languages, Cyrillic, etc.) |
| Embedding of third-party content | Yes (all web browser content: HTML, video, audio, VRML/3D, chat, etc.) |
| Functional extensions | Full flexibility through use of JavaScript (client side) Application interface (controller side) |
| Configuration / Engineering | |
| Integration of variables | Depends on the atvise® embedded implementation |
| Process picture editor fully graphic | Yes (integrated in atvise® builder) |
| Program editor | Yes (integrated JavaScript editor in atvise® builder) |
| Page editor source code | Yes (integrated HTML source editor in atvise® builder) |
| Graphic objects | Primitive: line, polygon, shape (any), rectangle, ellipse, Bezier curve, etc. Widgets: label, text field, table, trend, etc. |
| Object library | Yes, a comprehensive catalogue of preconfigured standard objects in pure vector graphics (customisable, expandable) includes, among other things, bar graphs, speedometers/gauges, tanks, engines, etc. |
| Graphics integration | SVG (and all others according to W3C) as well as pixel graphics (PNG, JPG etc.) |
| Animation types | Text, value, frame colour, background colour, text colour, visibility, operability, size x/y, position x/y, rotation, flashing, distortion, etc. |
| Graphical possibilities | Any shapes & cut-outs, rounding, simple and complex colour gradients, transparency, semi-transparency (alpha blending), rotation, shading, transformation/change of existing SVG graphics |
| Interface to the server | HTTP(S), FTP(S) |
| Import/Export | XML (customer-specific extensions can be implemented) |

1) Detailed information on supported operating systems and web browsers can be found at www.atvise.com and accessed in the "System Requirements" area.

2) Multitouch depending on device functionality, operating system and browser version