AGV MULTIConnect

The standard software for interfacing with MiR

Features

- SAP Connector
- OPC UA Connector
- MIR Connector
- Order management for MiRFleet manager
- Web based user interface for configuration and diagnostics
The standard software for interfacing with MiR

Features

AGV MultiConnect enables fast and cost-effective integration of mobile industrial robots in production systems.

AGV MultiConnect is ready-to-use software that just needs to be installed and configured. No programming is required.

AGV MultiConnect is a powerful and flexible platform that allows you to utilize communication channels to SAP and OPC UA simultaneously.

Warehouse transport orders can be initiated from SAP. At the same time, PLCs can start missions conveying empty load carriers without relying on SAP.

AGV MultiConnect contains a comprehensive order management tool for the MiRFleet manager as well as an intuitive web-based user interface for setting up SAP parameters, as well as OPC UA servers and nodes.

The integrated web portal displays current order status information from SAP and OPC in real-time. The diagnostic tools support technicians by directly outputting errors that occur during SAP, OPC UA or PLC communication.

Your advantage

Ready-to-use middleware enables easy integration between SAP and / or OPC and your MiRFleet manager.

We make constant improvements to our AGV MultiConnect software. So your system is always up-to-date.

For more than 20 years, software made by Artschwager + Kohl has driven the production and transportation of millions of goods worldwide: items, pallets, containers, barrels, bathtubs, automobile cockpits and carpets, driverless transport systems and much more.

Take advantage of our experience and know-how.

Please contact us, we are happy to help.

Conclusion

SAP connector
OPC UA connector
MiR connector
MiR order management

Web-based user interface for configuration and diagnostics offered as a ready-to-use software package.

Easy installation, configuration and use with no need to do programming.
Transport orders by SAP

A company plans to introduce MiR transport robots. The company uses SAP as their ERP system.

Transport orders are to be transferred to the MiR transport robots by SAP.

This requires middleware to integrate SAP with the MiRFleet manager. AGV MultiConnect was specifically developed for this very task.

You install and configure AGV MultiConnect. No programming is required on the middleware.

Your SAP uses standard protocols for sending and canceling warehouse tasks (e.g. transport orders). After completing the task (or the cancellation request), SAP receives a confirmation.

In the event of a malfunction, the web-based diagnostic interface can help the technicians to find the cause.

Transport orders by OPC UA

A company plans to introduce MiR transport robots. Transport orders are started directly from various PLCs.

One PLC controls how a mission transfers carriers from a production line to a collection point. Another PLC coordinates transport orders to replenish the production line with empty carriers.

All transports are to be coordinated only by PLCs without relying on an SAP ERP system.

This requires middleware software to integrate OPC UA servers with the MiRFleet manager. AGV MultiConnect was specifically developed for this very task.

You install and configure AGV MultiConnect. No programming is required on the middleware.

Each PLC can start a mission in the MiRFleet manager by providing the middleware with PLC variables. Once the mission completes, the PLC receives the corresponding confirmation.

In the event of a malfunction, the web-based diagnostic interface can help the technicians to find the cause.
The AGV MultiConnect was designed with modularity in mind. It offers:

- an interface for receiving SAP transport orders (SAP Connector)
- an interface for receiving OPC transport orders (OPC UA Connector)
- an interface for starting and monitoring missions in MiRFleet managers (MiR Fleet Connector)
- order management (Job Management)
- an integration with ERP systems other than SAP (optional)
- an integration with fleet management systems other than MiR (optional)

AGV MultiConnect is installed on a Windows PC.

MS SQL Server Express is used for data storage, at no additional cost.

Configuration and diagnostics are done using a web-based user interface. Integrated user administration allows for a flexible concept of user roles for configuration and diagnostics.

SAP Connector

SAP commissions transports by initiating warehouse transport orders. AGV MultiConnect supports the following IDoc:

- WMTOID01 Transfer
- WMTCID01 Confirm transfer
- WMCAID01 Cancel transfer

SAP provides source and destination position as well as priority with the transfer order. One or more so-called “missions” exist in a MiRFleet manager. One, two, or no parameters are supported when passing source and destination information.

Flexible source and destination mappings decide how SAP transfer orders are assigned to MiR missions.

These position mappings as well as SAP connection configuration can be maintained using a web based user interface.

OPC UA Connector

AGV MultiConnect supports an unlimited number of OPC UA servers through integrated OPC UA client technology.

Any number of "mission points" can be set up to start MiR missions. For each "mission point", OPC nodes Start, Status, and Error Code must be configured.

In addition, settings for mission, source, destination, as well as priority must be configured. This can be done with the user interface. Alternatively, these can also be configured through OPC nodes, in which case all information can be pushed from the PLC dynamically.

A mission supports one, two or no parameters when passing source and/or destination positions.

If a mission's source or destination is "hard-coded", the parameter(s) can be left empty during configuration.