

LYNQ

Licensing Guide

LYNQ MANUFACTURING EXECUTION SYSTEM (MES)

NOVEMBER 2020

Contents

Contents	1
Using This Guide	2
Introduction to LYNO Manufacturing Execution System (MES)	2
Licensing Requirements	3
Lifetime or Subscription	3
Named Resources	3
Automation Suites	4
Minimum License Purchase Requirements	5
Multi-Site License Requirements	5
Cloud or On Premise Deployment	5
Dual Use Rights	5
Multi-Language Availability	6
Additional Software and Services	6
Additional Resources and Device Automation Suites	6
Automation Services	6
Implementation Services	7
Consulting Services	8
Support Services	9
Appendix A: Factory Automation Suite	10
Appendix B: Device Automation Suites	11

Using This Guide

This guide is designed to improve your understanding of how to license LYNQ Manufacturing Execution System (MES) Software.

The examples presented in this guide are illustrative. LYNQ reserves the right to review or update this document at any time without notice.

For help determining the license requirements for a specific scenario, consult with your LYNQ account team or your LYNQ Certified Partner.

This guide does not supersede or replace any of the legal documentation covering use rights.

Introduction to LYNQ Manufacturing Execution System (MES)

Achieving delivery, quality and financial goals relies on the effectiveness of your resources. Getting the most from your employees and machines goes beyond scheduling. It requires intelligent insight and complete visibility of where time is being lost, using technology that can automate data collection and optimise workflow, to seamlessly connect planning and production activities.

LYNQ is reinventing manufacturing execution system (MES) software for manufacturers looking for a configurable, plug-and-play solution to digitalise and drive factory performance.

Formed around international standard IEC62264, LYNQ's all-in one solution can plan, track, automate, analyse and optimise factories to increase the effectiveness of available resources and improve efficiency, productivity and profitability.



Source: IEC62264-3 Generic activity model of manufacturing operations management

Licensing Requirements

Lifetime or Subscription

LYNQ MES software has two licensing models:

Lifetime – with Lifetime Licensing, you license perpetual rights to use the software, meaning you own the licenses and can continue to use the software after the term of the agreement. To keep your software up to date and supported, you are required to pay Annual Service Fees (ASF) in addition to Software License Fees (SLF). While the initial fees are higher than subscription, this model provides you with the option to secure access to the software while lowering your ongoing costs. In this model, you gain access to full functionality and capabilities of the software through a Lifetime Access License (LAL).

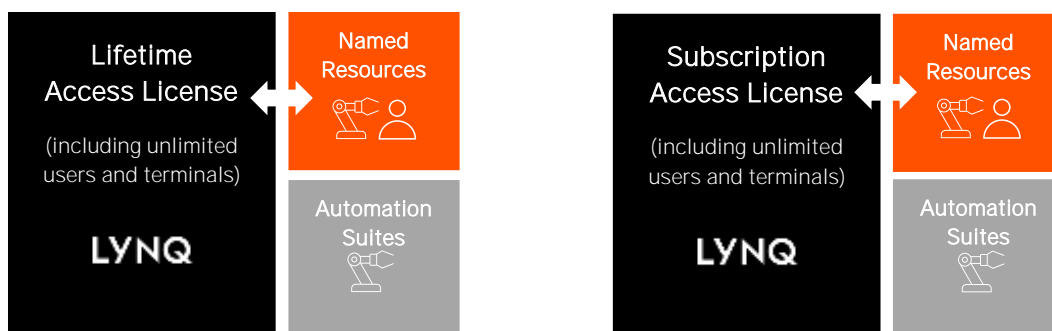
Subscription - with Subscription Licensing, you license non-perpetual rights to use the software, meaning you can use the software only during the term of the agreement secured by periodic payments. This model lowers your initial licensing costs and provides you with the flexibility to increase or decrease subscription license counts from one subscription term to the next. In this model, you gain access to full functionality and capabilities of the software through a Subscription Access License (SAL).

Please refer to [Solution Capabilities](#) for a comprehensive list of features, functions and capabilities accessible via a Perpetual and/or Subscription Access License.

Named Resources

After selecting your preferred licensing model, you need to identify the resources that you wish to manage and improve the effectiveness of, through use of the application.

Named Resource: the primary licensing basis is by Named Resource, which are assigned on a “named resource” basis, meaning each resource requires a separate Named Resource License (NRL) to accompany the Perpetual or Subscription Access License. A named resource is a manufacturing employee, machine or work centre that you wish to plan, track, automate, analyse or optimise.



Note: your Perpetual or Subscription Access License provides for an unlimited number of system **users** and/or **terminals**, making it easy for you to get started. A **user** is a management or administrative employee that is not directly involved in production and where scheduling and/or data collection is not required. A **terminal** is the software designed to operate a mobile or tablet device that is used for data collection and/or management purposes.

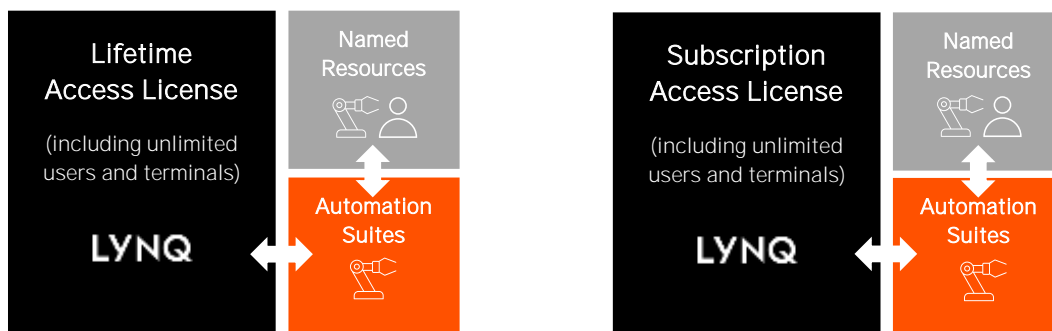
Licensing excludes Windows Server, SQL Server and/or Remote Desktop / Citrix services.

Automation Suites

While the Named Resource License (NRL) provides for manual data collection from your manufacturing employees, machines and/or work centres, LYNQ MES also provides the capability for **automatic data collection** from machines and other devices. Additional licensing is required for this in the form of Automation Suites. Suites provide access to collections of industrial drivers, which make it possible for LYNQ MES to connect to the most common PLC/IO devices used in the manufacturing industry. LYNQ provides two types of Automation Suites:

Factory Automation Suite (FAS) – where the factory environment has a variety of different PLC/IO devices that you wish to connect, the Factory Automation Suite is often the best choice. The suite contains the largest collection of manufacturing-based device drivers available, including more than 115 protocols commonly used in the manufacturing industry. It enables connectivity to a wide variety of plant floor devices including Allen Bradley, Fanuc, GE, Honeywell, Siemens and many more. See [APPENDIX A](#) for a full list of drivers included in this suite.

Device Automation Suites (DAS) - where the factory environment has only one or more types of PLC/IO devices, it may make more sense to purchase a specific driver suite (e.g. Siemens). The Device Driver Suites are a collection of drivers bundled together by device manufacturer or industrial application when only one or more drivers are required. See [APPENDIX B](#) for a selection of driver suites available.



Note: to automate data collection from your machines a Named Resource License (NRL) **and** Automation Suite (FAS or DAS) is required. To install, activate, configure and enable automatic data collection from your machines, LYNQ provides Automation Services. See [Additional Software and Services](#) for more information.

Minimum License Purchase Requirements

The following minimum licensing requirements apply to Lifetime and Subscription access licenses:

Lifetime – 1 named resource

Subscription – 10 named resources

For scheduling and data collection the following licensing requirements apply:

- to schedule any employee, work centre and/or machine a Named Resource License (NRL) is required.
- to collect data from any employee, work centre or machine a Named Resource License (NRL) is required.
- to automate data collection from your machines a Named Resource License (NRL) **and** Automation Suite (FAS or DAS) is required.

Multi-Site License Requirements

LYNQ MES is licensed for a single Production Server and location. In the event that the Production Server is accessed by multiple plants or factories (sites) within a group, **multiple instances** for each site on the same Production Server may be created. In this event, while the same Lifetime or Subscription Access License is applied to the server, additional Named Resource Licenses are required to be purchased for each instance. Named Resource Licenses (NRLs) may not be shared across multiple instances (i.e. sites).

Cloud or On Premise Deployment

LYNQ MES can be deployed privately and securely, on premise (at your site), in LYNQ's cloud or in a partner-hosted cloud. Please consult with your LYNQ account team or your LYNQ Certified Partner if you would like to deploy LYNQ MES in the cloud. Note: this requires a separate private cloud agreement with your hosting provider.

Dual Use Rights

One of the advantages of LYNQ MES is dual use rights. This allows customers the option to deploy LYNQ MES on both a Production and Sandbox Server. This might be necessary to provide additional control when upgrading software, providing training around the software or when migrating a LYNQ MES on-premise deployment to a cloud deployment. With Dual Use Rights, LYNQ MES can be deployed without the need to acquire an additional Lifetime or Subscription Access License or Named Resource Licenses for Dev/Test environments. Please refer to Lifetime or Subscription [End User License Agreement](#) for more information on use rights.

Multi-Language Availability

LYNQ MES is available in the following languages without any additional licensing requirements:

- English (UK/US)
- French (FR)
- German (DE)
- Spanish (ES)
- Portuguese (PT)
- Turkish (TR)

Additional Software and Services

Additional Resources and Device Automation Suites

Additional Named Resource Licenses (NRL) and/or Device Automation Suites (DAS) may be added to your Lifetime Access License after the initial purchase. In this event, Annual Service Fees for the additional software licenses will be pro-rated and added to your Annual Service Fee renewal.

To add Named Resource Licenses and/or Automation Suites to your Subscription Access License mid-term, requires your base subscription to be amended with a new subscription term applied. Please consult with your LYNQ account team or your LYNQ Certified Partner.

Automation Services

Automation services help customers connect machinery to LYNQ to determine equipment effectiveness (OEE), automatically. Including machine state (running, down or switched off) and output quantity (good and bad) over time. LYNQ provides controlled management of automated machine data, including error handling and live or controlled data processing to ERP/PLM systems. Automation services are available to customers during or post implementation and charged at an hourly rate.

Automation Services covers:

- **Discovery** workshop conducted to understand the requirements for reading automated industrial machinery data in LYNQ. The outcome of this workshop serves as a valuable source of reference during the design and configuration phase.
- **Design & Configuration** enables solutions consultants to install and configure the components of LYNQ factory automation. Involvement of key users during the configuration phase is of vital importance to ensure satisfaction and compliance with the established standards.
- **Training** provides end users with the necessary knowledge to sufficiently operate and maintain factory automation within LYNQ. Training will be provided in the customer's environment on a train-the-trainer basis.
- **User Acceptance Testing** is conducted by end users to verify that LYNQ's factory automation is configured ready for a production environment.
- **Transition** to a live production environment, is completed once user acceptance testing is signed off and a date has been agreed for go-live.

Implementation Services

Implementation services guarantees business transformation by optimising resources, processes and technology. LYNQ's proven implementation methodology together with industry and domain expertise ensures desired business outcomes are understood and achieved. LYNQ's implementation service mitigates risks of failure to ensure projects are delivered successfully on a fixed price basis.

Main Deliverables

- **Project Management** is performed throughout the project lifecycle, with the solutions consultant typically acting as Project Manager. The Project Manager is responsible for defining and fulfilling the objectives of the project. Resulting in mitigated risks and clearly defined deliverables with phased based approval.
- **Discovery** workshops are conducted to understand existing processes, company objectives and the requirement and expectations for improvements through the use of LYNQ. The outcome of these workshops serves as a valuable source of reference during the design and configuration phase.
- **Design & Configuration** enables solutions consultants to install and configure LYNQ in accordance with the identified requirements and needs. Involvement of key users during the configuration phase is of vital importance to ensure satisfaction and compliance with the established standards.
- **Training** provides end users with the necessary knowledge to sufficiently operate and maintain LYNQ. Training will be provided once LYNQ has been configured in the customer's environment on a train-the-trainer basis.
- **User Acceptance Testing** is conducted by end users to verify that LYNQ is configured ready for a production environment.
- **Transition** to a live production environment is completed once user acceptance testing has been signed off and a date has been agreed for go-live. During this phase, cut over tasks are completed to ensure go-live happens smoothly without any business disruption. Once transitioned, the solutions consultant will continue to provide post go live support for a 2 week period before handover to support services.
- **Customer Success Management** is offered post implementation to ensure LYNQ continually delivers business benefits. A dedicated customer success manager is assigned once the project is complete and success reviews are scheduled quarterly.

Consulting Services

Consulting services provide expert advice to customers during or post implementation. Consulting services may be used for a variety of purposes but typically offered when business requirements are not met through standard implementation services or when business requirements change and further consultation is required. Consulting services are charged at an hourly rate.

Consulting Services covers:

- **Custom Report Writing** for the development of formatted reports based on database queries for decision-making and analytical purposes. Typical tools used to produce custom reports include:
 - **Webhooks** a standard feature within LYNQ that allows data to be passed to other third party web based applications through the use of parameterised query strings. Additional configuration is required to fully implement this feature of LYNQ.
 - **Microsoft SharePoint** a browser based content management and collaboration tool, which easily integrates with LYNQ to provide additional content management capabilities.
 - **Microsoft Power Platform** a suite of tools designed to help businesses turn complex information into extractable insights. As an extension to the standard reporting capabilities within LYNQ, consulting services develop insights using:
 - **Microsoft PowerApps** offering rich forms, workflows and custom mobile apps to streamline processes. Integrating LYNQ with PowerApps helps increase productivity and automation.
 - **Microsoft Power-BI** a business analytics service which easily integrates with LYNQ to provide additional analytics and reporting capabilities.
 - **Microsoft SQL Reporting Services** a full-featured business report engine which easily integrates with LYNQ to provide additional analytics and reporting capabilities
 - **Microsoft SQL development** for prepared SQL code that may be utilised with other tools external to LYNQ.
- **Customisation** to suit unique or challenging business requirements, which are outside of the standard solution capabilities. Customisation may involve Microsoft SQL development.
- **Third Party Integration** for integrating to a variety of other business management systems such as PLM, CMMS, PAMS, WMS, QMS, Payroll and T&A.
- **Solution Configuration** for implementation of solution capabilities, outside of the original project scope.
- **Ad-hoc Training** outside of the standard training provided during implementation. Ad-hoc training may be requested when LYNQ has been configured to function differently due to changing business requirements or when refresher training is required due to staff turnover.

Support Services

Support Services provide effective and responsive support with unlimited support incidents and monitored service levels. By making use of the latest technologies LYNQ continue to add value to the customer through regular updates, new features and capabilities. For Lifetime agreements, Support Services are charged at a percentage of the current software list price and included as part of Annual Service Fees (ASF). For Subscription agreements Support Services are included.

Support Services covers:

- **Self Service** available 24/7 from the support portal with access to videos, knowledgebase articles, guides and whitepapers, software updates and more.
- **Help Desk** with monitored email support and online case logging and case history.
- **Remote Assist** for installations, upgrades, troubleshooting and diagnostics by LYNQ.
- **Client Success** a dedicated Customer Success Manager (CSM) to maximise return on investment with success reviews scheduled quarterly.

Appendix A: Factory Automation Suite

The factory automation suite contains the largest collection of manufacturing-based device drivers available, including more than 115 protocols commonly used in the manufacturing industry. It enables connectivity to a wide variety of plant floor devices. See below for a full list of drivers included:

- Advanced Simulator
- Allen-Bradley 1609 UPS
- Allen-Bradley Bulletin 900
- Allen-Bradley ControlLogix Ethernet
- Allen-Bradley ControlLogix Unsolicited
- Allen-Bradley Data Highway Plus
- Allen-Bradley DF1
- Allen-Bradley Ethernet
- Allen-Bradley Micro800 Ethernet
- Allen-Bradley Micro800 Serial
- Allen-Bradley Unsolicited Ethernet
- Analog Devices
- Aromat Ethernet
- Aromat Serial
- AutomationDirect DirectNET
- AutomationDirect EBC
- AutomationDirect ECOM
- AutomationDirect K Sequence
- AutomationDirect Productivity Series Ethernet
- Beckhoff TwinCAT
- BUSWARE Ethernet
- CODESYS Ethernet
- Contrex M-Series
- Contrex Serial
- Custom Interface
- Cutler-Hammer D50/D300
- Cutler-Hammer ELC Ethernet
- Cutler-Hammer ELC Serial
- Dataforth isoLynx
- DDE Client
- Fanuc Focas Ethernet
- Fanuc Focas HSSB
- Fuji Flex
- GE CCM
- GE EGD
- GE Ethernet
- GE SNP
- GE SNPX
- Hilscher Universal
- Honeywell HC900 Ethernet
- Honeywell UDC Ethernet
- Honeywell UDC Serial
- IDEC Serial
- Intelligent Actuator (IA) Super SEL
- InTouch Client
- IOtech PointScan 100
- Keyence KV Ethernet
- Krauss Maffei MC4 Ethernet
- Memory Based
- Mettler Toledo
- Micro-DC
- Mitsubishi CNC Ethernet
- Mitsubishi Ethernet
- Mitsubishi FX
- Mitsubishi FX Net
- Mitsubishi Serial
- Modbus ASCII
- Modbus Ethernet
- Modbus Plus
- Modbus Serial
- Modbus Unsolicited Serial
- MTConnect
- ODBC Client
- Omron FINS Ethernet
- Omron FINS Serial
- Omron Host Link
- Omron NJ Ethernet
- Omron Process Suite
- Omron Toolbus
- OPC DA Client
- OPC UA Client
- OPC XML-DA Client
- Optimization OptiLogic
- Opto 22 Ethernet
- Partlow ASCII
- Philips P8/PC20
- SattBus Ethernet
- SattBus Serial
- Scanivalve Ethernet
- Siemens S5
- Siemens S5 3964R
- Siemens S7 MPI
- Siemens S7-200
- Siemens TCP/IP Ethernet
- Siemens TCP/IP Unsolicited Ethernet
- Simatic/TI 505 Ethernet
- Simatic/TI 505 Serial
- SIXNET EtherTRAK
- SIXNET UDR
- Square D
- System Monitor
- Telemecanique Uni-Telway
- Thermo Westronics Ethernet
- Thermo Westronics Serial
- TIWAY Host Adapter
- Torque Tool Ethernet
- Toshiba Ethernet
- Toshiba Serial
- Toyopuc PC3/PC2 Ethernet
- Toyopuc Serial
- User Configurable (U-CON)
- WAGO Ethernet
- Yaskawa Memobus Plus
- Yaskawa MP Series Ethernet
- Yaskawa MP Series Serial
- Yokogawa Controller
- Yokogawa CX
- Yokogawa Darwin Ethernet
- Yokogawa Darwin Serial
- Yokogawa DX Ethernet
- Yokogawa DX Serial
- Yokogawa DXP
- Yokogawa HR
- Yokogawa MW
- Yokogawa MX
- Yokogawa YS100

Appendix B: Device Automation Suites

The device driver suite is a collection of drivers bundled together by device manufacturer or industrial application when only one or more drivers are required. Select from the available device driver suites shown below.

ALLEN-BRADLEY SUITE

- Allen-Bradley ControlLogix Ethernet
- Allen-Bradley ControlLogix Unsolicited
- Allen-Bradley Data Highway Plus
- Allen-Bradley DF1
- Allen-Bradley Ethernet
- Allen-Bradley Micro800 Ethernet
- Allen-Bradley Micro800 Serial
- Allen-Bradley Unsolicited Ethernet
- Allen-Bradley Micro800 Serial

CUTLER HAMMER SUITE

- Cutler-Hammer D50/D300
- Cutler-Hammer ELC Ethernet
- Cutler-Hammer ELC Serial

FANUC FOCAS SUITE

- Fanuc Focas Ethernet
- Fanuc Focas HSSB

GE SUITE

- GE CCM
- GE EGD
- GE Ethernet
- GE SNP
- GE SNPX

HONEYWELL SUITE

- Honeywell HC900 Ethernet
- Honeywell UDC Ethernet
- Honeywell UDC Serial

MODBUS SUITE

- Modbus ASCII
- Modbus Ethernet
- Modbus Plus
- Modbus Serial
- Modbus Unsolicited Serial

mitsubishi SUITE

- Mitsubishi CNC Ethernet
- Mitsubishi Ethernet
- Mitsubishi FX
- Mitsubishi FX Net
- Mitsubishi Serial

OMRON SUITE

- Omron FINS Ethernet
- Omron FINS Serial
- Omron Host Link
- Omron NJ Ethernet
- Omron Process Suite
- Omron Toolbus

OPC CONNECTIVITY SUITE

- OPC DA Client
- OPC UA Client
- OPC XML-DA Client

SIEMENS SUITE

- Siemens S5
- Siemens S5 3964R
- Siemens S7 MPI
- Siemens S7-200
- Siemens TCP/IP Ethernet
- Siemens TCP/IP Unsolicited Ethernet

SIEMENS SUITE


- Simatic/TI 505 Ethernet
- Simatic/TI 505 Serial

YOKOGAWA SUITE

- Yokogawa Controller
- Yokogawa CX
- Yokogawa Darwin Ethernet
- Yokogawa Darwin Serial
- Yokogawa DX Ethernet
- Yokogawa DX Serial
- Yokogawa DXP
- Yokogawa HR
- Yokogawa MW
- Yokogawa MX

Plus many more...

A full list of industrial drivers can be found [here](#). Please contact your LYNO account team for pricing.



LYNO Ltd, 8 Barnes Wallis Road,
Fareham, Hampshire, UK PO15 5TU

LYNQ Your business.
Understood.