Overview

System 1* represents GE Bently Nevada’s flagship condition monitoring solution that seamlessly integrates with our industry leading products including online and portable devices. System 1 provides scalability by adapting to the condition monitoring requirements at your facility, as well as flexibility by connecting to any Bently Nevada’s field devices. Our products are designed for diverse applications and equipment failure modes at industrial facilities. We offer flexible packages ranging from portable to comprehensive plant-wide condition monitoring. We recommend understanding your equipment and defining your operation and maintenance goals first. Then, choose the software package and field devices that help you achieve those goals.

A successful condition monitoring program requires equipment knowledge including an understanding of failure modes and operational criticality, together with a cross functional team, process rigor, and enabling technologies. Bently Nevada offers flexible solutions ranging from product delivery and deployment services to supporting service agreements through which we partner with you to manage your condition monitoring program.
Package Ordering (Perpetual License)

General Industrial Perpetual Package

3071/70 System 1 for Industrials - Perpetual
3071/70-AA-BB-CC

AA: Industry Type
01 – Pulp and Paper
02 – Air Separation
03 – Sugar Production
04 – Wastewater
05 – Drilling Rigs
06 – Steel Production
07 – Food & Beverage
08 – Manufacturing
09 - Pharmaceuticals
10 - Marine Vessel*

*Navy, Container Ship, LNG Transport, FSRU, etc. NOT applicable for FPSO, FSO, or FLNG vessels

BB: Package Size
01 – Small Database
02 – Medium Database
03 – Large Database
04 – Extra Large Database

CC: Quantity of Server Licenses
## – Numeric Entry [1→25]

Industrial Packages Include
✓ Premium+ license(s)
✓ Unrestricted device import (Limits based on server)
✓ Unrestricted process data import (OPC DA)
✓ Unrestricted process data export (OPC DA)
✓ Unlimited Display Clients

Industrial Packages Do Not Include
✓ Database Replication

Power Generation Perpetual Package

3071/80 System 1 for Power Generation - Perpetual
3071/80-AA-BB-CC

AA: Package Option
01 – New Order
02 – Expansion Order

BB: Plant Output (MW)
## – Numeric Entry [1-30,000 MW]

CC: Quantity of Server Licenses
## – Numeric Entry [1→25]
Package Ordering (Subscription License)

We offer subscription licenses that include support for and updates to System 1. Software functionality is identical for perpetual and subscription licenses. Key structural differences exist between these license types:

Subscription License
✓ Smaller upfront investment (flat year-over-year OPEX)
✓ Subscription license fee includes support and updates.
✓ Software stops working if subscription is cancelled.

Perpetual License
✓ Larger upfront investment (one-time CAPEX)
✓ Must purchase support and updates (M&S) separately (lower OPEX than subscription)
✓ Software license does not expire. Support and updates cease if M&S is cancelled.

General Industrial Subscription Package
3072/70 System 1 for Industrials - Subscription
3072/70-AA-BB-CC-DD-EE

AA: Purchase Type
  01 – New (First Type Purchase)
  02 – Renewal

BB: Term (Subscription Term in Years)
  ## – Numeric Entry [3→5]

CC: Industry Type
  01 – Pulp and Paper
  02 – Air Separation
  03 – Sugar Production
  04 – Wastewater
  05 – Drilling Rigs
  06 – Steel Production
  07 – Food & Beverage
  08 – Manufacturing
  09 - Pharmaceuticals
  10 - Marine Vessel †

† Navy, Container Ship, LNG Transport, FSRU, etc.

Not applicable for FPSO, FSO, or FLNG type vessels

Power Generation Subscription Package
3072/80 System 1 for Power Generation - Subscription
3072/80-AA-BB-CC-DD-EE

AA: Purchase Type
  01 – New (First Type Purchase)
  02 – Renewal

BB: Term (Subscription Term in Years)
  ## – Numeric Entry [3→5]

CC: Package Option
  01 – New Order
  02 – Expansion Order

DD: Plant Output (MW)
  ## – Numeric Entry [1-30,000 MW]

EE: Quantity of Server Licenses
  ## – Numeric Entry [1→25]
Get Connected

### 3500 Device Series

**3500 – Full Rack**
- /22, /25, /32, /33, /40, /42, /44, /45, /50, /60, /61, /64, /65 - Standard & M series monitors
- ✓ 14 monitor slots with simultaneous sampling
- ✓ 1 sec trend / 10 min waveform data capture
- ✓ High resolution alarm data capture
- ✓ High resolution startup/shutdown data capture

**3500 – Mini Rack**
- Same monitors as Full Rack
- ✓ 7 monitor slots
- ✓ Same capabilities as Full Rack

**TDI Secure [/42E /45E /PV]**
- Recommended for monitoring machines that cannot be natively connected to System 1 via standard devices (3rd party HW, Cyber, etc.)
- ✓ 24 Vib + 24 Process points + 4 Tachs

### Distributed Device Series

**ADAPT 3701 /40 /44 /46**
- ✓ 12 simultaneous monitoring points + 2 Tachs
- ✓ 1 sec trend / 10 min waveform data capture
- ✓ High res alarm and SUSD data capture

### System 1 Classic Connector

**System 1 Classic Connector**
- ✓ Connect to legacy Bently Nevada Devices, including TrendMaster, TDXNet, 1701 FMIM

### Condition Monitoring & Basic Protection

**vbOnline* Pro Monitoring Device**
- ✓ 12 simultaneous monitoring points + 2 tachs
- ✓ 30 sec trend / 10 min waveform data capture
- ✓ Simultaneous Alarm Snapshot (1 per 30 sec)

**2300 Monitoring Device**
- ✓ 2 simultaneous monitoring points + 1 tach
- ✓ 1 sec trend / 10 min waveform data capture

**Ranger Pro Device**
- ✓ Single axis: 1 accel point + 1 temperature
- ✓ Triaxial: 3 accel points + 1 temperature point
- ✓ 10 min trend / 6 hour waveform data capture

### Process Data

**OPC DA Server Import**
- ✓ Includes up to 6000 tags for a S1 Server
- ✓ 1 sec trend data capture

**OPC DA Server Export**
- ✓ Includes up to 10000 tags for a S1 Server
- ✓ 1 sec data export rate

### Portables

**Analyzers and Data Collectors**
- ✓ 2 and 4 Channel Models
- ✓ Hazardous Area Approvals

### Database Replication

**3071/16-AA-BB-CC System 1 Replication**

**AA: Tx Server(s) (License Value of Tx Server, # - 1→n)**
- ✓ Conduit to move data to the business network
- ✓ Contains config info and connection to devices

**BB: Rx Server(s) (Qty # – 1→n)**
- ✓ Database that mirrors the S1 server on Plant Network
- ✓ Supports 80-90% of daily condition monitoring tasks

**CC: Physical Installation Media**
- 01 – No (Default)
- 02 – Yes
Stay Current – Software Maintenance & Support

Maintenance and Support (M&S)

3071/20 System 1 Maintenance & Support
3071/20-AA-BB-DD-DD-EE-FF-GG-HH

AA: M&S Support Level
  01 – Gold Support
  02 – Platinum Support

BB: M&S Term
  ## – Numeric Entry [1→20 years]

CC: System 1 Products Covered Under M&S Agreement
  01 – System 1 17.x (3071 Family)
  02 – System 1 6.x (3060 Family)

DD: Total System 1 Software License Price
  ## – Numeric Entry [In Local Currency]

EE: Customer Activation Number (CAN)
  ## – Text Entry [CAN#####]

FF: Software Contact Name
  ## – Text Entry [Ex: Bently Nevada]

GG: Software Contact Email Address
  ## – Text Entry [Ex: BentlyNevada@bhge.com]

II: M&S Order Type
  01 – New Order
  02 – Renewal Order
  03 – Expansion Order

System 1 Maintenance and Support provides access to 24/7 technical support and several System 1 user and security focused releases annually.

System 1 software maintenance and support agreement provides access to the latest updates and platform upgrades through a simplified web portal interface.

Customers with System 1 version 6.x and Ascent* qualify for a FREE upgrade to the latest platform (v17.2 release Nov 30, 2017). See 3071/65.

✓ 24/7 technical support (regional specialists)
✓ Access to the latest software releases
  o Operating system updates
  o Cyber security patches
  o User-driven feature additions

Free System 1 & Ascent* Platform Upgrade

3071/65 System 1 Software Free Platform Upgrade

AA: Customer Activation Number (CAN)
  ## – Text Entry [CAN#####]

BB: Software Package Upgraded
  01 – System 1 v6.x
  02 – Ascent 2015

CC: New Software Package
  01 – Premium+ Package
  02 – Premium Package
  03 – Advanced+ Package
  04 – Advanced Package
  05 – Fundamental Package
  06 – Power Generation Package

DD: Quantity of Display Clients
  01 – Single Client Package
  05 – Small Package [6 Clients]
  10 – Medium Package [11 Clients]
  15 – Unlimited Clients

EE: Quantity of Server Licenses (DAQs)
  ## – Numeric Entry [1→n]

FF: Historical Data Migration
  01 – Yes [System 1 v6.81+ & Ascent* v2015] (v17.2)
  02 – No

GG: Qty of 3500 Devices - Turbomachinery
  ## – Numeric Entry [1→n]

HH: Qty of 3500 Devices - General Machines
  ## – Numeric Entry [1→n]

II: Qty of 3500 Devices - Recip Machines (v17.2)
  ## – Numeric Entry [1→n]

JJ: Qty of TDI Secure Devices
  ## – Numeric Entry [1→n]

KK: Qty of OPC DA Import Licenses (1 per server)
  ## – Numeric Entry [1→n]

LL: Qty of OPC DA Export Licenses (1 per server)
  ## – Numeric Entry [1→n]

MM: Plant Design Output (Power Gen Package Only)
  ## – Numeric Entry [1→n]
Specifications

Refer to System 1* Software Package Datasheet, document number 108M5214, for specifications, product capabilities, server options, and language packs.