

# DCMlink Unified Actuator Software

Intelligence Made Simple



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## The DCMLink Software

DCMLink Software is the command and control software for all of Bettis Electric actuators. DCMLink is an innovative software platform that enhances plant productivity by unifying all electric actuators on a common platform while allowing plant operators to gain deep insights into asset status and performance. DCMLink enable users to configure, calibrate, monitor, and diagnose all electric actuators from a central location independent of protocol, actuator or host system. The software extends the useful life of field assets by providing actuator data gathering, condition monitoring, events log and prioritization of actuator alarms in a unified and consistent user interface backed by Emerson Dashboard guidelines.

### Features:

- Unified user interface for all electric actuators including support for TEC2, XTE3000, EHO, TEC2000, M2CP, MPA, and HQ
- Real time actuator monitoring and control
- Integrated management of asset data, profiles, alarm, and event logs
- Advanced diagnostics including torque profile curves, valve control, and status monitor
- Easy to use configuration and calibration methods
- PlantWeb™ compatible Alarms in NE-107 format, alarm log, and event log features
- Communicate using Modbus, TCP-IP, HART, RS232, and Bluetooth protocols
- Simplified tree view and logo view for easy navigation
- Air, dry, or lubricated and inert gases
- Dew point at least 10K below ambient temperature
- For sub-zero applications, take appropriate measures
- Mentioned pressure levels are "gauge pressures"  
Gauge pressure is equal to absolute pressure minus atmospheric pressure

### NOTE:

The Product Data Sheet will be updated when new versions of the software release. To ensure you have the latest version and information, check our [DCMLink downloads page](#).

In case there are any questions or inquiries regarding this PDS and supporting information, please do not hesitate to contact [info.actuationtechnologies@emerson.com](mailto:info.actuationtechnologies@emerson.com)

Figure 1 Tag ID and Status in DCMLink

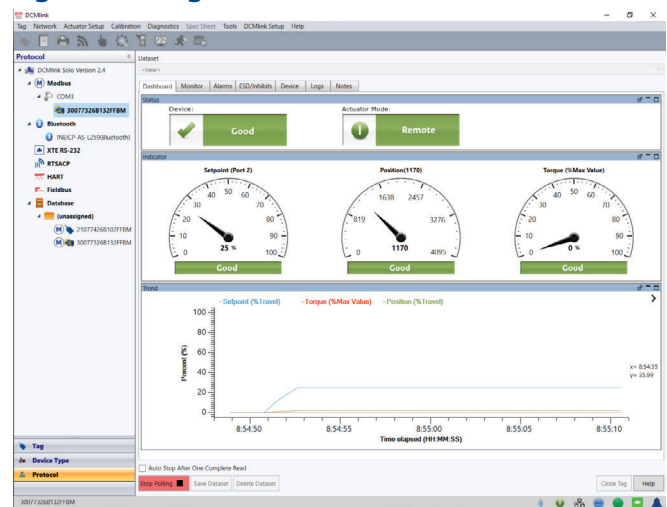
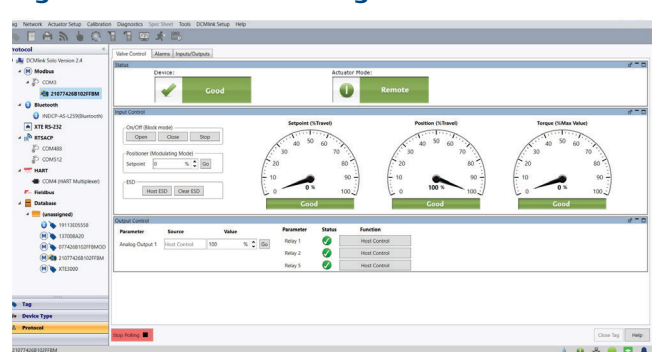


Figure 2 Valve Controlling in DCMLink



## DCMLink Standard Features

### Unified Actuator Configuration and Control

- Easy to use, next generation software based on human centered design. Gather the necessary installation tools and documentation
- Promotes single, uniform solution to control, configure and monitor all Electric Actuators
- Supports TEC2, TEC2000, XTE3000, EHO, M2CP, MPA, and HQ

### Actuator Status Monitoring

- Real time and remote monitoring
- Live trending of critical parameters such as position and torque
- Simplified status reports for over 50 alarms
- Alarms reporting based on NE-107 standard
- Analog or digital indicator dials

### Easy Configuration

- Detailed actuator configuration
- Import/export configuration to/from other devices

### Multiple Networking Protocol Support

- Modbus
- Modbus TCP/IP
- RDM Slave (TEC2000)
- Bluetooth
- R232 (XTE3000 Native)
- HART (SOLO and AMS SNAP-ON)

### Bluetooth Capability

- Auto search function to automatically find Bluetooth enabled actuators
- Ability to configure, control, and diagnose data over Bluetooth

### Valve Diagnostics

- Torque profile for M2CP, TEC2000, TEC2, and XTE3000
- Pressure Profile for EHO
- Offline and Online Diagnostics
- Archived torque profile

### Valve Control

- Initiate Partial stroke test (PST) or Emergency shutdown (ESD)
- Control relays/Analog Out
- Change setpoint

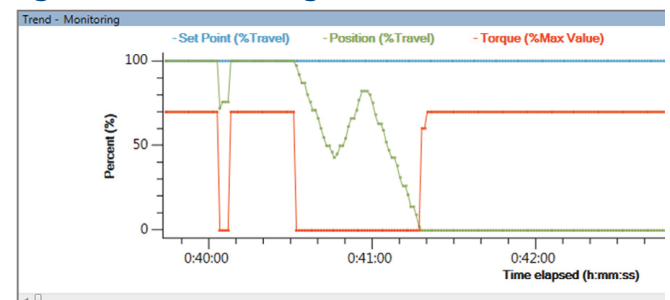
**Figure 3 Actuator Status Monitoring**



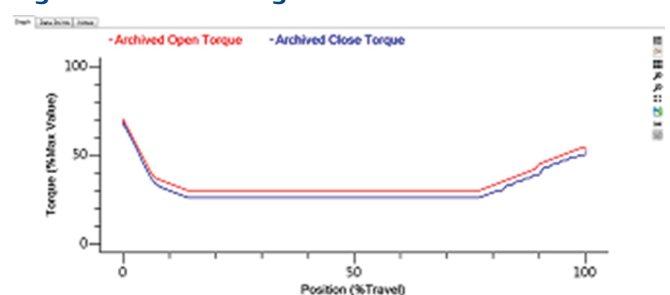
**Figure 4 Alarm Management**



**Figure 5 Live Trending of Critical Parameters**



**Figure 6 Valve Diagnostics in DCMLink**



### Calibration

- Analog Input/Output Calibration
- EHO Self Calibration
- Analog Torque Pot Calibration

### Trace Log

- Ability to record all error conditions
- Support technical resolution of field issues

### Event Logging

- Data event log captures and logs events by user, time, and date
- Actuator configuration changes
- Calibration changes
- Diagnostic tests

**Figure 7 Event Logger**

Sr. No.	Event No.	Time	Event Type	Additional Information
287	0	2000 January 01 04:22:20.00 PM	Valve Movement Started, Current Position = 1451 (0x05A8)	Valve Position has Moved or Stopped Moving
286	1	2000 January 01 04:22:20.00 PM	Motor Status: Source = Analog, Motor Action = Motor Opening, Desired Setpoint = 2906 (0x0B5C)	Motor Status
285	2	2000 January 01 04:22:04.00 PM	LDM Internal Temperature is 1°C	Internal Temperature of LDM
284	3	2000 January 01 04:21:56.00 PM	Valve Movement Stopped at Position = 1419 (0x0588)	Valve Position has Moved or Stopped Moving
283	4	2000 January 01 04:21:56.00 PM	Motor Status: Source = Analog, Motor Action = Motor Stopped, Desired Setpoint = 2867 (0x0B33)	Motor Status
282	5	2000 January 01 04:21:46.00 PM	Valve Movement Started, Current Position = 4713 (0x1269)	Valve Position has Moved or Stopped Moving
281	6	2000 January 01 04:21:46.00 PM	Motor Status: Source = Analog, Motor Action = Motor Opening, Desired Setpoint = 2497 (0x09C1)	Motor Status
280	7	2000 January 01 04:21:42.00 PM	Valve Movement Stopped at Position = 4681 (0x1249)	Valve Position has Moved or Stopped Moving
279	8	2000 January 01 04:21:42.00 PM	Valve Movement Started, Current Position = 4681 (0x1249)	Valve Position has Moved or Stopped Moving
278	9	2000 January 01 04:21:40.00 PM	Valve Movement Stopped at Position = 4649 (0x1229)	Valve Position has Moved or Stopped Moving
277	10	2000 January 01 04:21:40.00 PM	Valve Movement Started, Current Position = 4649 (0x1229)	Valve Position has Moved or Stopped Moving
276	11	2000 January 01 04:21:36.00 PM	Valve Movement Stopped at Position = 4681 (0x1249)	Valve Position has Moved or Stopped Moving
275	12	2000 January 01 04:21:36.00 PM	Valve Movement Started, Current Position = 4681 (0x1249)	Valve Position has Moved or Stopped Moving
274	13	2000 January 01 04:21:34.00 PM	Valve Movement Stopped at Position = 4649 (0x1229)	Valve Position has Moved or Stopped Moving

**Figure 8 Actuator Configuration**

Parameter	Actuator	Dataset
Control Mode	Network	Analog
Remote Control Signal	Momentary	Momentary
Local Control Signal	Momentary	Momentary
Seating	Torque	Torque
Backseat	Torque	Position
LED Color	Open Green/Close Red	Open Green/Close Red
Close Torque Limit	50 %	50 %
Open Torque Limit	50 %	50 %

## DCMLink Specifications

The following information lists the language, hardware and software compatibilities of DCMLink. In case there are any questions or inquiries regarding this section and supporting information, please do not hesitate to contact DCMLink Helpdesk:

**Phone Number:**

International Access Code +1-(281) 499-1561 / (800) 679-1561 toll-free (US Only)

**Fax Number:**

International Access Code +1-(281) 499-8445

**E-Mail Address:**

**[DCMLink.Registration@emerson.com](mailto:DCMLink.Registration@emerson.com)**

**Supported Languages**

- DCMLink Software v2.4 is available in English

**Supported Operating Systems**

- Windows 10 (64 bit)

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**NOTE:**

DCMLink Software is not supported on Windows XP (32/64-bit), Windows 2012 Server (64-bit), Windows 7 Professional SP1 (32/64-bit), Windows 2012 server (64-bit) and Windows 8 (64 bit).

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**Software Requirements**

- Microsoft Edge version 42 or later is recommended

**Hardware Requirements**

- Computer and Processor:
  - 1 Gigahertz (GHz) or faster processor
- Memory:
  - 1 Gigabyte (GB) RAM (32-bit) or 2 GB RAM (64-bit)
- Hardware:
  - No Trending -- 65 Megabytes (MB) available storage space
  - Trending -- 125 Megabytes (MB) available storage space
- Drive:
  - CD-ROM Drive
- Display:
  - 1024 X 768 resolution
  - 256 colors
- RS485 converter:
  - Recommend using USOPTL4, optically isolated product from B&B Electronics

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