



Powerful creative freedom

Recognized as the ultimate all-in-one BACnet Advanced Workstation (B-AWS), RC-Studio® from Reliable Controls provides outstanding functionality, value, and ease of programming.



Better by design

www.reliablecontrols.com/RCS

TECH SPECS

Recommended Workstation Requirements

- Processor: Intel Core i5
- Two CPU cores are recommended for each Reliable Controls application installed
- Storage: 10 GB of free hard disk space
- RAM: 4 GB
- Graphics: 1920 x 1080, 32-bit color display
- EIA-232 port (or USB adapter) required for direct connection
- 100 Mbps Ethernet NIC
- Operating System: Microsoft Windows 10

FEATURES

Advanced Workstation

- Automatic BACnet discovery of all devices
- Ability to retain discovered devices between sessions
- Create/delete, drag and drop BACnet objects
- Intuitive database worksheets
- Cut and paste Program code
- Full Priority Array control
- Workstation Groups for 3rd party integration

Full-Featured Programmability

- Inputs, Outputs, Values
- Schedules, Calendars
- Runtime Logs, Single-point and Multipoint Trend Logs
- Editor for writing Program code, including syntax highlighting and Watch lists
- Editor for annotation and linking System Group graphics
- Program and System Group changes can be easily sent to multiple controllers using Send Multiple and Templates features

Simulator

- Program an entire system offline without the need for controller hardware

Graphic Support

- BMP, GIF, TIFF, JPG, EMF, PNG, and DIB background images
- HTML5 animation graphics from RC-GrafXSet
- Flash animation graphics
- Links to URLs, keywords, and other System Group graphics

Network Management

- Alarm monitoring and annunciation to screen, email, and printer
- Wildcard searching and report generating
- Customized Point Reports
- Manual Points Report
- Automated network backup

Templates

- Deploy and update multiple MACH-System controllers with a single panel file Template
- Changes are automatically propagated across the network to selected controllers

Certification

- BTL listed (B-AWS) Pending

ORDERING

RC-ST3-1

- License for a single workstation
- Comes with RC-Key (USB Software Key)

RC-ST3-1A

- Adds single workstation to existing license (must have previously purchased RC-ST3-1)

RC-ST3-S

- Subscription for 12 months of online software updates

RC-ST3-S1

- License for a single workstation
- Comes with soft license (no USB Software Key required)

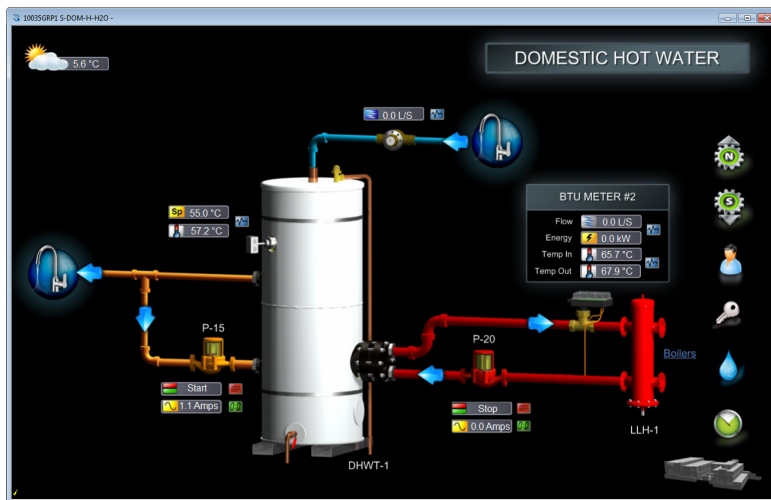
RC-ST3-S1A

- Adds single workstation to existing license (must have previously purchased RC-ST3-S1)

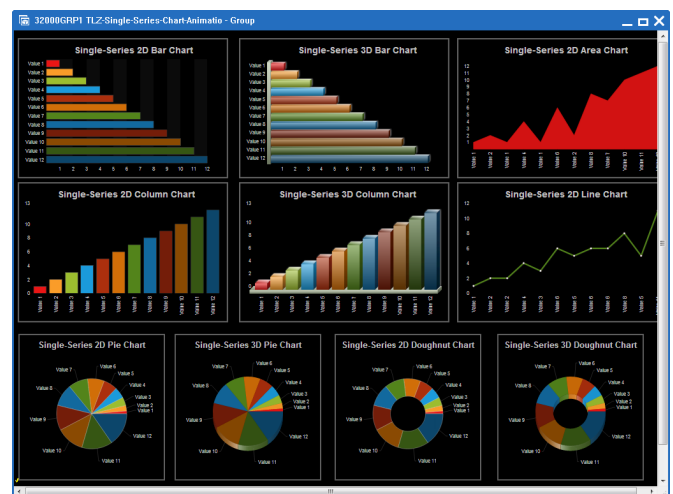
RC-ST3-M

- Hardcopy of software manual

SCREEN CAPTURES

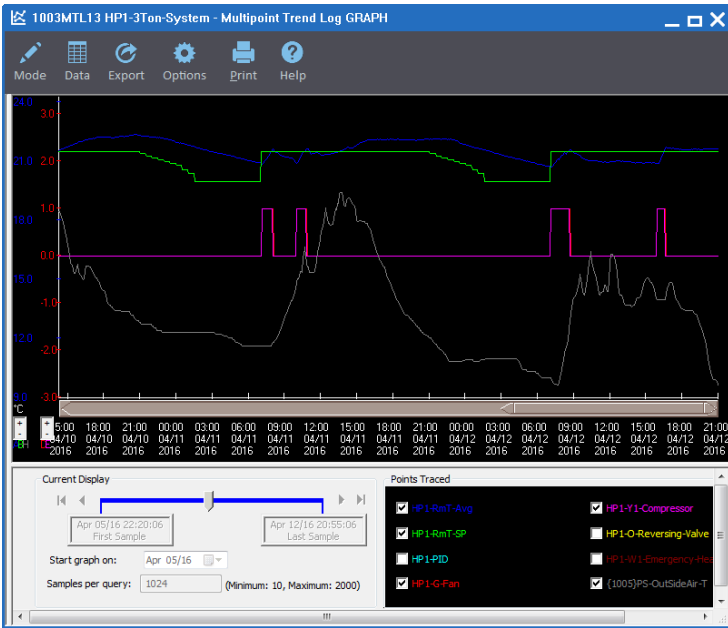


System Group with equipment components from RC-GrafXSet

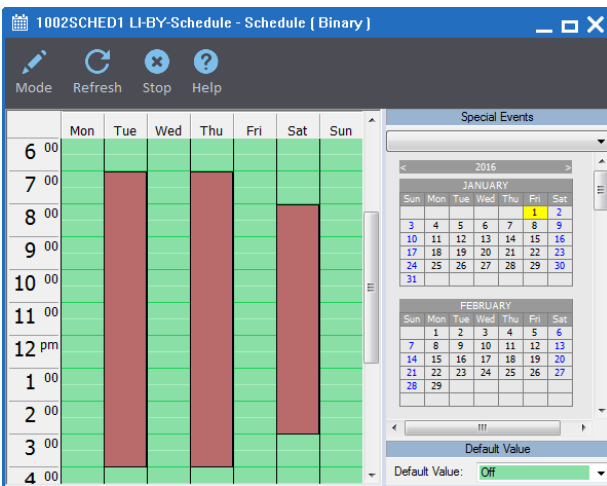


System Group with charts from RC-GrafXSet

SCREEN CAPTURES



Multipoint Trend Log



Schedule

HP* - Wild Point

Point Name	Mnemonic
1 HP1-Test	1003STL1
2 HP-RmT-SP-SCHED	1003SCHED1
3 HP1-3Ton-PRG	1003PRG1
4 HP1-3Ton-RmT	1003MTL10
5 HP1-3Ton-RmT	1000MTL4
6 HP1-3Ton-System	1003MTL13
7 HP1-3Ton-System	1000MTL6
8 HP1-Call-For-Cool	1003BV18
9 HP1-Call-For-Cool-RTL	1003STL5018
10 HP1-Call-For-Heat	1003BV17
11 HP1-Call-For-Heat-RTL	1003STL5017
12 HP1-Compressor-Lockout	1003BV19
13 HP1-Compressor-Lockout-RTL	1003STL5019
14 HP1-G-Fan	1003B03
15 HP1-G-Fan-RTL	1003STL4003
16 HP1-Mode	1003MV23
17 HP1-O-Reversing-Valve	1003B04
18 HP1-O-Reversing-Valve-RTL	1003STL4004
19 HP1-PID	1003LOOP1
20 HP1-RmT-Avg	1003AV21
21 HP1-RmT-Max	1003AV22
22 HP1-RmT-Min	1003AV20
23 HP1-RmT-SP	1003AV16
24 HP1-RmT-Upper-Hallway	1003A11
25 HP1-W1-Emergency-Heat	1003B01
26 HP1-W1-Emergency-Heat-RTL	1003STL4001

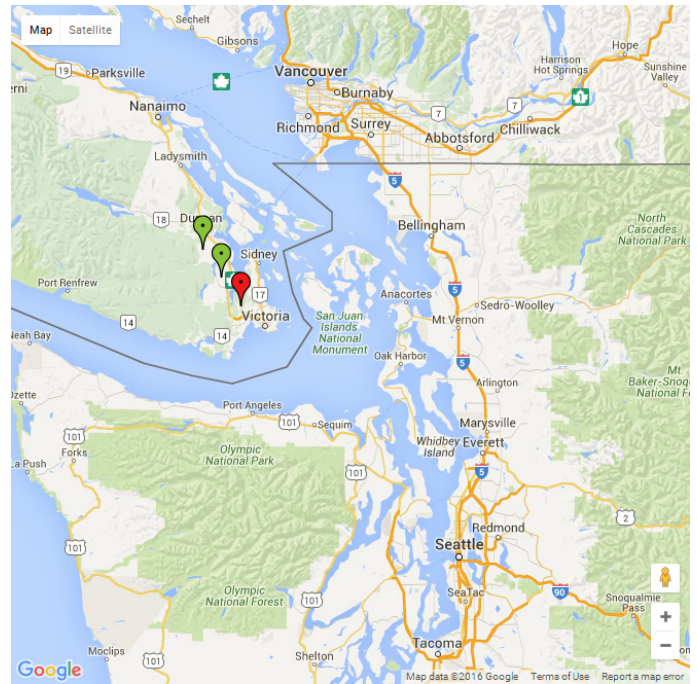
Wild Point search results

1003PRG1 HP1-3Ton-PRG - Program

```

T 10 HP1-RmT-Min = MIN( HP1-RmT-Upper-Hallway , HP2-RmT-Lower-Entrance , SSE-RmT-Dining-Room
T 20 HP1-RmT-Avg = AVG( HP1-RmT-Upper-Hallway , HP2-RmT-Lower-Entrance , SSE-RmT-Dining-Room
T 30 HP1-RmT-Max = MAX( HP1-RmT-Upper-Hallway , HP2-RmT-Lower-Entrance , SSE-RmT-Dining-Room
T 35 REM ***** HP1-Mode = 1 (COOL) , = 2 (HEAT)
T 36 IF HP1-Mode = 4 THEN STOP HP1-Call-For-Heat
T 40 IF HP1-PID > 75 AND ( HP1-Mode = 2 OR HP1-Mode = 1 ) THEN STOP
T 50 IF HP1-PID < 49 OR HP1-Mode = 1 THEN STOP
T 60 IF HP1-PID < 25 AND ( HP1-Mode = 1 OR HP1-Mode = 2 ) THEN STOP
T 70 IF HP1-PID > 51 OR HP1-Mode = 2 THEN STOP
T 85 HP1-Compressor-Lockout = SWITCH( HP1-Compressor-Lockout )
T 90 IF HP1-Call-For-Heat OR HP1-Call-For-Cool THEN
T 99 REM ***** Heating
T 110 IF NOT HP1-Call-For-Heat THEN GOTO 165
T 120 IF HP1-Compressor-Lockout THEN GOTO 150
T 130 IF TIME-OFF( HP1-Y1-Compressor ) > 0.05:00
T 140 GOTO 165
T 150 IF TIME-OFF( HP1-W1-Emergency-Heat ) > 0.05:00
T 160 IF TIME-ON( HP1-W1-Emergency-Heat ) > 0.05:00
    
```

Program code



System Group with Google Map from RC-GrafXSet

PRP1 Heat Pump Components - Point Report 1

Name	Mnemonic	Value	Auto/Manual	Unit	Priority	Changed
HP1-G-Fan	1003B03	Stop	Auto	Stop/Start	10	
HP1-O-Reversing-Valve	1003B04	Stop	Auto	Stop/Start	10	
HP1-Y1-Compressor	1003B02	Stop	Auto	Stop/Start	10	
HP1-W1-Emergency-Heat	1003B01	Stop	Auto	Stop/Start	10	
HP2-G-Fan	1003B07	Stop	Auto	Stop/Start	10	
HP2-O-Reversing-Valve	1003B08	Stop	Auto	Stop/Start	10	
HP2-Y1-Compressor	1003B06	Stop	Auto	Stop/Start	10	
HP2-W1-Emergency-Heat	1003B05	Stop	Auto	Stop/Start	10	

Total 8 points

Point Report

SCREEN CAPTURES

BACnet

- BACnet - Connected
 - Network Status
 - Alarms
 - Direct Access
 - Passwords
 - Workstation Groups
 - Point Reports
- B/IP 48888
 - B/IP Network Status
- + LAN Room (1000)
- Network - 100
 - Network 100 - Network Status
- + Front Yard (1001)
- + Back Yard (1002)
- + Heat Pump (1003)
- + Green House (1004)
- + Potting Shed (1005)

System Tree

Heat Pump (1003)

- Object List
- System Groups
- Inputs
- Outputs
- Values
- PID-Loops
- Schedules
- Calendars
- Multipoint Trend Logs
- Single-point Trend Logs
- Runtime Report
- Notification Classes
- Programs
- Arrays
- Tables

PROPERTIES

Device Object Tree

Dealer Information: