

Model FHC50 Fume Hood Controller

Model FHM10 Fume Hood Monitor

LonWorks® Communications

LonWorks® communications are installed in the Model FHM10 fume hood monitors and Model FHC50 fume hood controllers. This document provides the technical information needed to communicate between the host DDC system and the Model FHC50 units. This document assumes the programmer is familiar with LonWorks®. Further technical assistance is available from TSI if your question is related to TSI interfacing to a DDC system. If you need further information regarding LonWorks® programming in general, please contact Echelon corporation.

Node Object Network Variables

SNVT Number	Description	SNVT Name	SNVT Type
4		nviRequest	SNVT_obj_request
5		nviSetTime	SNVT_time_stamp
6		nvoStatus	SNVT_obj_status
7		nvoAlarm	SNVT_alarm

Fume Hood Controller Object Network Variables

SNVT Number	Description	SNVT Name	SNVT Type
15	Setback Mode	nviControlMode	SNVT_occupancy
16	Emergency Mode	nviEmergency	SNVT_hvac_emerg
17*	Remote Control Override	nviOverrideOn	SNVT_switch
18	Face Velocity	nvoFaceVelocity	SNVT_speed_mil
19	Flow Rate.	nvoExhaust Flow	SNVT_flow
20*	Damper or Valve Position	nvoControlPos	SNVT_lev_percent
21*	Sash Position Percent.	nvoSashPosPcnt	SNVT_lev_percent
22*	Sash Open Area.	nvoSashOpenArea	SNVT_area
23	Status	nvoUnitState	SNVT_state
	0	Setback Status	
	1	Low Velocity Alarm Status	
	2	High Velocity Alarm Status	
	3	Low Flow Alarm Status	
	4	High Flow Alarm Status	
	5	High Sash Position Alarm Status	
	6	Velocity Sensor Error Status	
	7	Data Error Status	
	8	Emergency Status	
23*	9	Remote Control Override Status	
25*	Setback Face Velocity Setpoint	nvoSetbFVSetp	SNVT_speed_mil
26	Normal Low Face Velocity Alarm Setpoint	nvoNormLoFVAlmSetp	SNVT_speed_mil
27	Normal High Face Velocity Alarm Setpoint	nvoNormHiFVAlmSetp	SNVT_speed_mil

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SNVT Number	Description	SNVT Name	SNVT Type
28	Setback Low Face Velocity Alarm Setpoint	nvoSbLoFVAlmSetp	SNVT_speed_mil
29	Setback High Face Velocity Alarm Setpoint	nvoSbHiFVAlmSetp	SNVT_speed_mil
30*	Normal Flow Setpoint	nvoNormFlowSetp	SNVT_flow
31*	Setback Flow Setpoint	nvoSetbFlowSetp	SNVT_flow
32	Normal Low Flow Alarm Setpoint	nvoNmLoFloAlSetp	SNVT_flow
33	Normal High Flow Alarm Setpoint	nvoNmHiFloAlSetp	SNVT_flow
34	Setback Low Flow Alarm Setpoint	nvoSbLoFloAlSetp	SNVT_flow
35	Setback High Flow Alarm Setpoint	nvoSbHiFloAlSetp	SNVT_flow
36*	Minimum Flow Setpoint	nvoMinFlowSetp	SNVT_flow
37*	Maximum Flow Setpoint	nvoMaxFlowSetp	SNVT_flow
38*	Minimum Damper Setpoint	nvoMinDampSp	SNVT_lev_percent
39*	Maximum Damper Setpoint	nvoMaxDampSp	SNVT_lev_percent
40*	Setback Damper Position Setpoint	nvoSetbCtrlPos	SNVT_lev_cont
41*	High Sash Position Alarm Setpoint	nvoHiSashAlmPos	SNVT_lev_cont
	nciMaxSendTime		
	nciMinSendTime		
	nciSndDeltaFlow		
	nciSndDeltaSpeed		
	nciSndDeltaPos		

* Feature only available on Model FHC50 fume hood controller.

Description of LON SNVTs

SNVT	Command Supported	Action
nviEmergency:	EMERG_NORMAL EMERG_PURGE	Sets NORMAL mode Sets EMERGENCY mode

Note: all other commands set NORMAL mode

SNVT	Value Sent	Action
nviOverrideOn	x.x 1 x.x 0	Moves damper to override position Exit Override mode x.x is damper position between 0.0 to 100.0

Note: Override is only available on Model FHC50 fume hood controller.

Specifications subject to change without notice.

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Contact your local TSI Distributor or visit our website www.tsi.com for more detailed specifications.

