

# BNU-LWA (PNF-B16H1)

## BNU-LWA(for the use in LonWorks)

Easy interface between BMS and LG Air Handling Unit  
 - LonWorks Gateway for LG Air Handling Unit system  
 - Very widely applicable protocol(**LonTalk®** protocol )



### Features

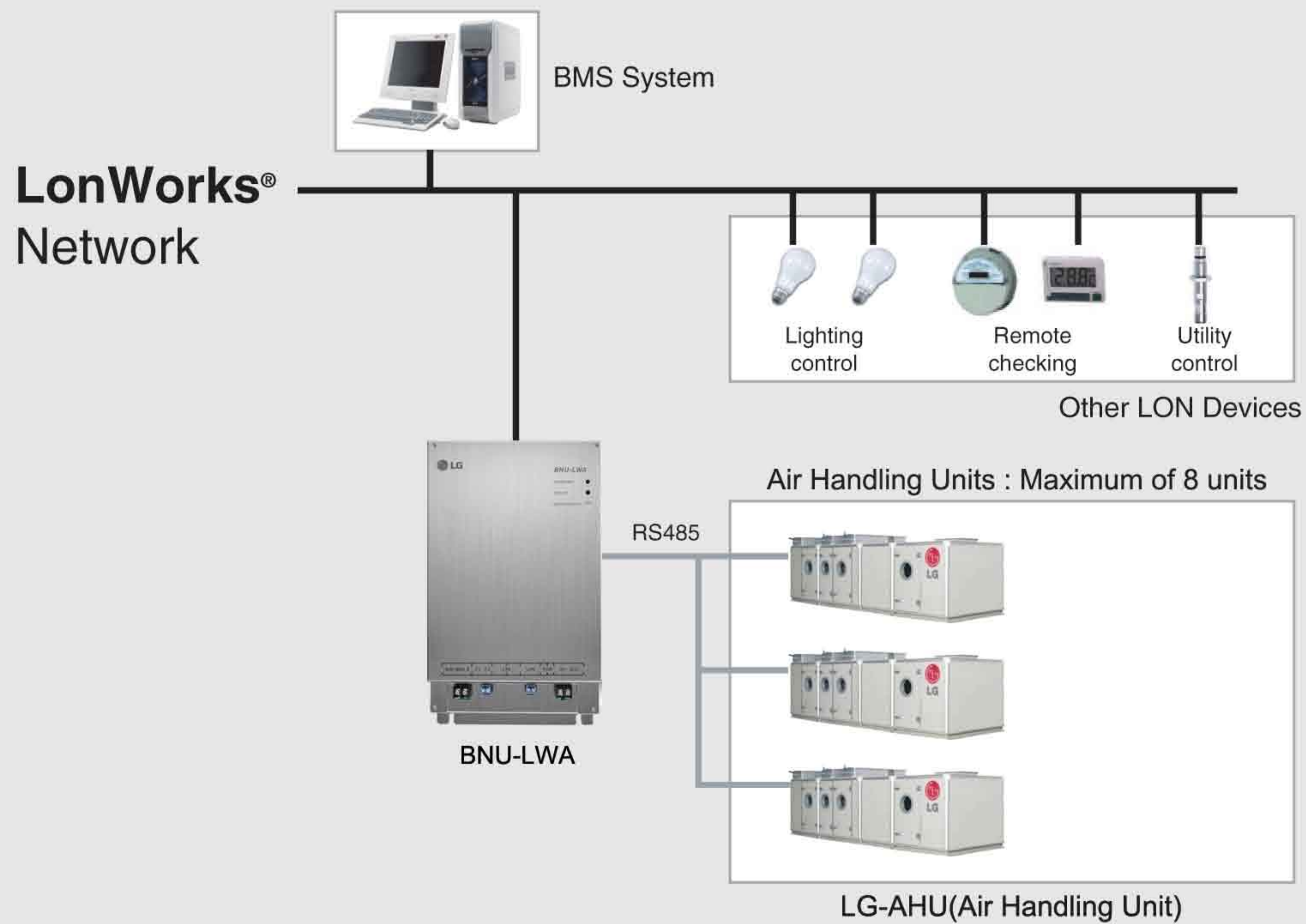
- LonMark® interoperability Guidelines Version 3.4 Compliance.
- LonWorks gateway between LonMark/LonTalk® protocol and LGAP (LG Air conditional Protocol)  
The Gateway can convert the LonTalk protocol to the LGAP protocol.
- Process ability
  - 8 units
  - valid address for each unit : 0x00 ~ 0x07
- Self installation verification function using internet
  - setting gateway
  - diagnosis of communication status on LG Air Handling Unit network

### Air Handling Unit Function block

Controlling	Monitoring
On/Off Command	On/Off status report
Operation mode setting	Operation mode status report
Humidifier On/Off Command	Humidifier On/Off status report
Enthalpy mode On/Off Command	Enthalpy mode On/Off status report
Lock setting	Lock status report
Set point of Temperature setting	Set point of Temperature status report
Set point of Humidity setting	Set point of Humidity status report
Set point of OA Damper setting (Cooling, Heating, Fan mode)	Set point of OA Damper status report (Cooling, Heating, Fan mode)
Set point of EA Damper setting (Cooling, Heating, Fan mode)	Set point of EA Damper status report (Cooling, Heating, Fan mode)
Set point of MA Damper setting (Cooling, Heating, Fan mode)	Set point of MA Damper status report (Cooling, Heating, Fan mode)
	Error status report
	Current supply air temperature
	Current return air temperature
	Current out-door air temperature
	Current mixed air temperature
	Current supply air Humidity
	Current return air Humidity
	Current out-door air Humidity
	Current mixed air Humidity
	Filter status report
	Current space Co2 status report
	Current space VOC status report
	Current damper status report (OA, EA, MA)
	Fan status report (Supply, Return)
	Heater status report

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## System Configuration



## Technical Specifications

Index	Details
Dimension(WxHxD)	178mm x 237mm x 50mm
Communication Port	RS485 Connector LG-Net(connects to LG-AHU) LonWorks FT-10 Connector(connects to BMS) Ethernet port
Ethernet	RTL8201B REALTEK (10/100 BASE-T)
Debug	RS-232C
Serial	RS-485 Port (LG-NET)
LonWorks	FT-10 Free Topology channel
Input	Dip-SW (6 bit)
LED	Serial, Lonwork, Ethernet, Power, Run
Power	DC9~12V, 1~2A

- FT-10 line is used to connect communication lines between BMS System and the BNU-LWA Gateway for LonWorks®

Contact  
CONTROL

# BNU-LWA (PNF-B16H1)

## Technical Specifications

### Standard Function Block

SNVT_havc_mode	nviHeatCool
SNVT_switch	nviSetRH
SNVT_switch	nviEconEnable
SNVT_switch	nviLock
SNVT_switch	nviOnOff
SNVT_switch	nviFireDetect
SNVT_temp_p	nviSetpoint
SNVT_lev_percent	nviSpaceRH
SNVT_lev_percent	nviOAD_C
SNVT_lev_percent	nviEAD_C
SNVT_lev_percent	nviMXD_C
SNVT_lev_percent	nviOAD_H
SNVT_lev_percent	nviEAD_H
SNVT_lev_percent	nviMXD_H
SNVT_lev_percent	nviOAD_F
SNVT_lev_percent	nviEAD_F
SNVT_lev_percent	nviMXD_F
SNVT_temp_p	nviSpaceTemp

### SCC (8508) FB

### Air Handling Unit Network Variables

SNVT_havc_mode	nvoHeatCool
SNVT_switch	nvoSetRH
SNVT_switch	nvoAutoVent
SNVT_switch	nvoLock
SNVT_switch	nvoOnOff
SNVT_switch	nvoFireDetect
SNVT_temp_p	nvoSetpoint
SNVT_lev_percent	nvoSpaceRH
SNVT_lev_percent	nvoOAD_C
SNVT_lev_percent	nvoEAD_C
SNVT_lev_percent	nvoMXD_C
SNVT_lev_percent	nvoOAD_H
SNVT_lev_percent	nvoEAD_H
SNVT_lev_percent	nvoMXD_H
SNVT_lev_percent	nvoOAD_F
SNVT_lev_percent	nvoEAD_F
SNVT_lev_percent	nvoMXD_F
SNVT_hvac_status	nvoUnitStatus
SNVT_temp_p	nvoSupplyTemp
SNVT_temp_p	nvoOutdoorTemp
SNVT_temp_p	nvoVentTemp
SNVT_temp_p	nvoMixTemp
SNVT_lev_percent	nvoSupplyRH
SNVT_lev_percent	nvoOutdoorRH
SNVT_lev_percent	nvoVentRH
SNVT_lev_percent	nvoMixRH
SNVT_switch	nvoFilter
SNVT_ppm	nvoSpaceCO2
SNVT_ppm	nvoSpaceVOC
SNVT_lev_percent	nvoOAD_P
SNVT_lev_percent	nvoEAD_P
SNVT_lev_percent	nvoMXD_P
SNVT_switch	nvoSupplyFAN
SNVT_switch	nvoVentFAN
SNVT_switch	nvoHeater
SNVT_switch	nvoHumidi
SNVT_temp_p	nvoSpaceTemp