

Making Building Automation go Jurther









**LON Products** 

March 2009

LON gateways designed for integration of third party systems into LonWorks based control systems

IntesisBox® LON - Mitsubishi Electric A.C. (Domestic/Mr.Slim) IntesisBox® LON - KNX IntesisBox® LON - Modbus TCP Server

IntesisBox® LON - Panasonic air conditioning

LON gateways designed for integration of LON devices or systems into other control systems (KNX, Modbus, AMX, Crestron....)

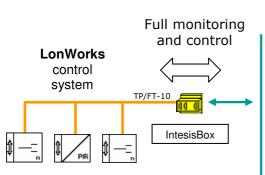
IntesisBox® KNX - LON IntesisBox® Modbus Server - LON IntesisBox® ASCII Server - LON





# IntesisBox® LON series

LON gateways designed for integration of third party systems into LonWorks based control systems



#### Media

Ethernet KNX TP-1 (EIB) RS232 RS485

#### **Protocols**

KNX EIB **MODBUS** 

**Proprietary** 

#### **Systems**

Building control Lighting Blinds Rooms

Metering **Electricity Meters Energy meters** 

**HVAC** Chillers Heaters Thermostats

#### Manufacturers

Siemens ABB Merten Jung Berker Theben

Merlin Gerin Kamstrup Siemens

Ciat Daikin Trane Climaveneta Lennox Carel

And many others





# IntesisBox® LON - Mitsubishi Electric A.C. (Domestic/Mr.Slim)

Order Code: ME-AC-LON-1



LonWorks interface for Domestic & Mr.Slim (commercial) series of Mitsubishi Electric air conditioners.

- The ME-AC-LON-1 interface has been designed in co-operation with Mitsubishi Electric to offer full monitoring/control of Domestic & Mr.Slim series of air conditioners from LonWorks control systems.
- It connects to the LonWorks network (TP/FT-10 channel) in one side, and directly to the PCB of the A.C. indoor unit in the other side, no other external power is required. The cable to connect to the A.C. indoor unit is also included in the scope of delivery of the interface.
- Each A.C. indoor unit to integrate requires one ME-AC-LON-1 interface. The interface in mountable on DIN rail, wall, or even inside the A.C. indoor unit in some models. Reduced dimensions 93 x 53 x 58 mm.
- Easy configuration from any LonWorks standard commissioning tool, with input and output Standard Network Variable Types (SNVTs) to command and to get the real states of the AC unit's variables.
- Simultaneous use of the A.C. unit's IR remote control and the ME-AC-LON-1 is allowed, the same control functions of the IR remote control are possible with the ME-AC-LON-1, and some others really useful as for example to stop the unit when the window of the room is open.
- Fully bi-directional monitoring and control of the A.C. unit: Operation Mode, Set Point and Ambient Temperature, Vane Position, Alarms...





#### IntesisBox® LON - KNX

Order Code: IBOX-LON-KNX-200 / IBOX-LON-KNX-A / IBOX-LON-KNX-B





Gateway for monitoring and control KNX EIB installations from LonWorks based control systems (TAC, Kiebak & Peter...)

- IBOX-LON-KNX-200/A/B have been designed to offer full integration of KNX EIB installations into LonWorks based control systems
- This is a powerful and cost effective solution that will allow you to use and combine
  in your projects the very best of both control technologies, LonWorks and KNX, as
  for example integrate any KNX based lighting control transparently into the
  LonWorks based BMS system.
- Connects directly to the EIB bus in one side, and in the other side it connects to the LonWorks control system via TP/FT-10 channel.
- Fully bi-directional monitoring and control between KNX and LonWorks.
- Allows bindings of its internal SNVTs in LonWorks side using standard LonWorks commissioning tools (LonMaker...). The gateway is seen as one more node into the LonWorks network allowing all standard commissioning features of LonWorks.
- IBOX-LON-KNX-200 supports up to 200 points, IBOX-LON-KNX-A up to 500 points, and IBOX-LON-KNX-B up to 4000 points.
- IBOX-LON-KNX-200/A/B are configured using LinkBoxLON, a software tool for windows<sup>TM</sup> with a powerful and friendly graphical interface for an easy and quick gateway's configuration procedure. LinkBoxLON is supplied along with the purchase of IntesisBox with no additional cost.





### IntesisBox® LON - Modbus TCP Server

Order Code: IBOX-LON-MBS-A / IBOX-LON-MBS-B







Gateway for full integration of LonWorks networks with Modbus TCP control systems (BMS, SCADA, PLC...)

- IBOX-LON-MBS-A/B is a powerful and cost effective solution that will allow you to fully integrate Lonworks networks with Modbus TCP control systems (BMS, SCADA, PLC, etc).
- With a Modbus TCP server port in one side, and direct connection to LonWorks networks via TP/FT-10 channel in the other side.
- Fully bi-directional integration of Modbus and LonWorks.
- Allows bindings of its internal SNVTs in LonWorks side using standard LonWorks commissioning tools (LonMaker...). The gateway is seen as one more node into the LonWorks network allowing all standard commissioning features of LonWorks. This allows monitoring and control of the LonWorks network from a SCADA or PLC with Modbus TCP client driver, and without overloading the LonWorks network by a continuous polling of LonWorks variables.
- IntesisBox is a Modbus TCP server device in the Modbus side, with ethernet 10/100 Mbps port.
- IBOX-LON-MBS-A allows integration of up to 1000 points, IBOX-LON-MBS-B up to 4000 points.
- IBOX-LON-MBS-A/B are configured using LinkBoxLON, a software tool for windows<sup>TM</sup> with a powerful and friendly graphical interface for an easy and quick gateway's configuration procedure. LinkBoxLON is supplied along with the purchase of IntesisBox with no additional cost.





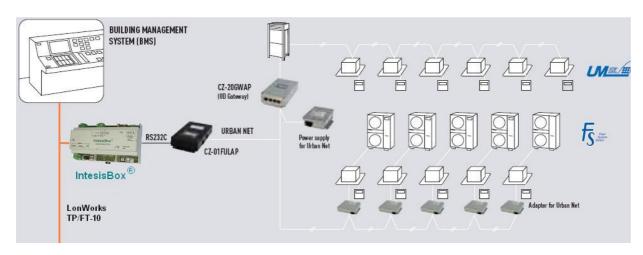
IntesisBox<sup>®</sup>

### IntesisBox® LON - Panasonic air conditioning

Order Code: IBOX-LON-PANURBAN







Gateway for integration of Panasonic commercial and industrial air conditioning into LonWorks building management systems

- IntesisBox IBOX-LON-PANURBAN is a powerful gateway providing full LonWorks connectivity to Panasonic commercial and industrial air conditioning systems. For this integration all A.C. indoor units must be inter-connected in UrbanNet topology and Panasonic's serial interface CZ-01FULAP must be also connected to UrbanNet, see diagram above.
- Fully bi-directional integration of the A.C. indoor units' variables in LonWorks (Ambient temperature, Set Point temperature, Operation Mode, Fan Speed, Alarm...).
- Allows bindings of its internal SNVTs in LonWorks side using standard LonWorks commissioning tools (LonMaker...). The gateway is seen as one more node into the LonWorks network allowing all standard commissioning features of LonWorks. XIF file is provided.
- IBOX-LON-PANURBAN allows integration of up to 64 A.C. indoor units.







LON gateways designed for integration of LON devices or systems into other control systems (KNX, Modbus, AMX, Crestron....)

#### Manufacturers

Siemens ABB Merten JUNG Berker Theben AMX Crestron LiteTouch

And many others

**Protocols** 

KNX EIB Modbus

ASCII

Media

RS232 RS485

Ethernet

KNX TP-1 (EIB)

Full monitoring and control

LonWorks network TP/FT-10 IntesisBox

> Air conditioners Chillers Heaters **Thermostats** Fan coil controllers Room controllers Power meters **Energy meters BMS PLCs**





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# IntesisBox® KNX - LON

Order Code: IBOX-KNX-LON-A / IBOX-KNX-LON-B



Gateway for integration of VRV air conditioning of the main manufacturers into KNX EIB installations, and in general to integrate any LON (TP/FT-10) device into KNX EIB.

- IBOX-KNX-LON-A and IBOX-KNX-LON-B have been designed to offer a full integration (monitoring and control) of DAIKIN air conditioners into KNX EIB installations, specially suited for small / medium size installations. The gateway not only allows DAIKIN integration but integration into KNX EIB of any LON (TP/FT-10) device or system.
- Connects directly to the EIB bus in one side, and in the other side it communicates via LON with the DAIKIN system. The LON interface DMS504B51 from DAIKIN is required for this integration.
- Independent monitoring/control (bi-directional) from KNX of every A.C. indoor unit or group of units, of multiple parameters (ambient temperature, set point temperature, operation mode, fan speed...).
- IBOX-KNX-LON-A supports up to 500 points and communication to up to 64 LON devices, IBOX-KNX-LON-B supports up to 4000 points and communication to up to 128 LON devices.
- IntesisBox KNX series are configured using LinkBoxEIB, a software tool for windows<sup>TM</sup> which is supplied along with the purchase of IntesisBox with no additional cost. Demo configuration files are also supplied for LinkBoxEIB with no additional cost, making the configuration of IntesisBox for integration of many brands of air conditioning (DAIKIN, Mitsubishi Electric, Mitsubishi Heavy, Toshiba, Fujitsu-General, Samsung, LG...) extremely easy and quick, almost plug & play.





IntesisBox<sup>®</sup>

March 2009

#### IntesisBox® Modbus Server - LON

Order Code: IBOX-MBS-LON-A / IBOX-MBS-LON-B



Gateway for monitor and control of VRV air conditioning systems of the main manufacturers from Modbus (RTU or TCP) master or client devices (SCADA, BMS, PLC, HMI, TouchPanels...), and in general to monitor/control any LON (TP/FT-10) system or device from Modbus.

- IBOX-MBS-LON-A and IBOX-MBS-LON-B have been designed to offer a full integration (monitoring and control) of DAIKIN VRV air conditioners into Modbus systems, specially suited for small / medium size installations. The gateway not only allows DAIKIN integration but many other air conditioning brands, and in general integration into Modbus of any LON (TP/FT-10) device or system.
- It connects directly to the Modbus network in one side (RS232, RS485, ETH), and in the other side it communicates via LON (TP/FT-10) to the DAIKIN system through the Daikin DMS-IF interface. The Daikin DMS-IF LonWorks<sup>®</sup> interface (ref. DMS504B51) is required to be installed in the Daikin system for this integration.
- Independent monitoring/control (bi-directional) from Modbus of each Daikin indoor unit or group of units, of multiple parameters (Ambient and Set Point Temperature, Operation Mode, Fan Speed...).
- IBOX-MBS-LON-A supports up to 500 points and communication to up to 64 LON devices, IBOX-MBS-LON-B supports up to 4000 points and communication to up to 128 LON devices.
- IntesisBox Modbus Server series are configured using *LinkBoxMB*, a software tool for windows<sup>TM</sup> which is supplied along with the purchase of IntesisBox with no additional cost. *Demo configuration files are also supplied for LinkBoxMB with no additional cost, making the configuration of IntesisBox for integration of many brands of air conditioning (DAIKIN, Mitsubishi Heavy, Mitsubishi Electric, Toshiba, Fujitsu-General, Samsung, LG...) extremely easy and quick, almost plug & play.*





IntesisBox<sup>®</sup>

### IntesisBox® ASCII Server - LON

Order Code: IBOX-ASCII-LON-A / IBOX-ASCII-LON-B



Gateway for monitor and control of VRV air conditioning systems of the main manufacturers from programmable control systems (AMX, Crestron, PC...), and in general to monitor/control any LON (TP/FT-10) system or device using very simple text messages.

- IBOX-ASCII-LON-A and IBOX-ASCII-LON-B have been designed to offer a full integration (monitoring and control) of DAIKIN VRV air conditioners into programmable control systems like AMX, Crestron, LiteTouch, etc. The gateway not only allows DAIKIN integration but many other air conditioning brands, and in general monitoring and control of any LON (TP/FT-10) device or system using very simple text messages (ASCII characters).
- It connects directly to the programmable controller in one side through RS232, and in the other side it communicates via LON (TP/FT-10) to the DAIKIN system through the Daikin DMS-IF interface. The Daikin DMS-IF LonWorks<sup>®</sup> interface (ref. DMS504B51) is required to be installed in the Daikin system for this integration.
- Independent monitoring/control (bi-directional) from the programmable controller of each Daikin indoor unit or group of units, of multiple parameters (Ambient and Set Point Temperature, Operation Mode, Fan Speed...).
- IBOX-ASCII-LON-A supports up to 500 points and communication to up to 64 LON devices, IBOX-ASCII-LON-B supports up to 4000 points and communication to up to 128 LON devices.
- IBOX-ASCII-LON-A/B are configured using *LinkBoxASCII*, a software tool for windows<sup>TM</sup> which is supplied along with the purchase of IntesisBox with no additional cost. *Demo configuration files are also supplied for LinkBoxASCII with no additional cost, making the configuration of IntesisBox for integration of many brands of air conditioning (DAIKIN, Mitsubishi Heavy, Mitsubishi Electric, Toshiba, Fujitsu-General, Samsung, LG...) extremely easy and quick, almost plug & play.*





### Официальный дистрибьютор





INTESIS SOFTWARE provides innovative solutions for home and building automation in more than 40 countries around the world

