IntesisBox®

IBOX-ASCII-KNX

KNX to ASCII Server gateway

Order Codes:
IBASCKNX6000000 (600 points)
IBASCKNX3K00000 (3000 points)

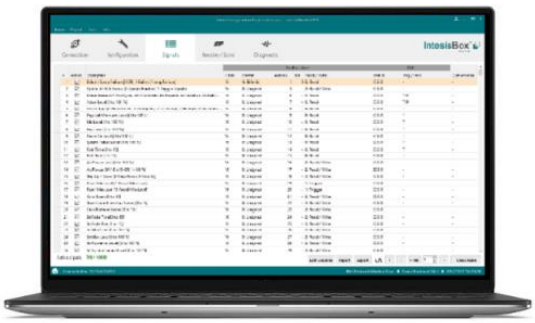
HOW IT WORKS

The IntesisBox ***IBOX-ASCII-KNX*** Gateway has been specially designed to work as a translator between a KNX installation and ASCII protocol-based control and monitoring systems.

IntesisBox acts as a KNX device in its KNX interface, reading/writing points of other KNX devices of the installation, and offering this point's values of KNX device through its ASCII interface using simple ASCII messages.

KNX devices are connected to the KNX port. ASCII interface could use serial communication (RS232 or RS485) or TCP/IP connection.

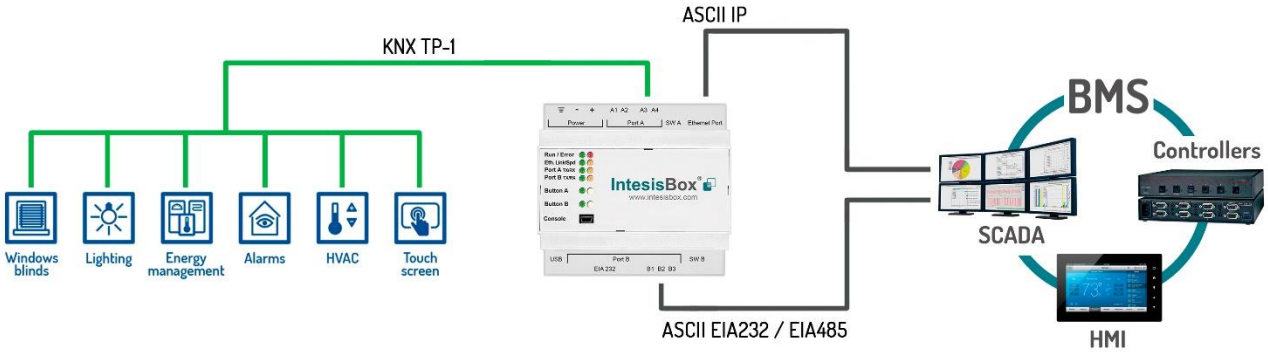
Configuration project is done through IntesisBox MAPS.



FEATURES

- Handles conversion between ASCII and KNX devices
- Automatically send a write request to the ASCII bus when its value changes
- Datalogging through external USB port
- Configuration through IP or USB (Console) port
- Front cover LED indicators to provide easy to check communication status on both the Ethernet and serial ports
- Includes IntesisBox MAPS with automatic updates for both IntesisBox MAPS and Gateway's firmware

INTEGRATION EXAMPLE



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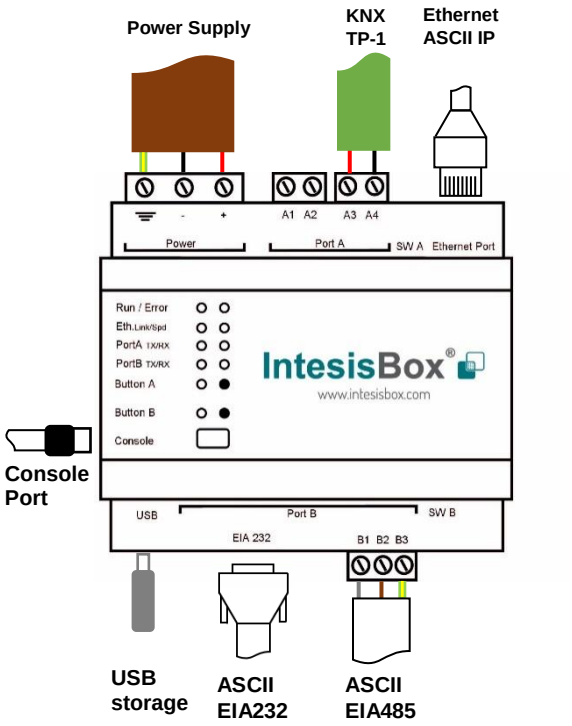
CONNECTIONS



PROTOCOLS

ASCII

ASCII is the acronym for the *American Standard Code for Information Interchange*. It is a code for representing 128 characters as numbers, with each letter assigned a number from 0 to 127.

ASCII codes represent text in computers, telecommunications equipment and other devices.

In an ASCII file, each alphabetic, numeric, or special character is represented with a 7-bit binary number.

BACnet

BACnet is the Data Communication Protocol for Building Automation and Control Networks. Developed under the auspices of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

BACnet is an American national standard, a European standard, a national standard in more than 30 countries and an ISO global standard. The protocol is supported and maintained by ASHRAE Standing Standard Project committee 135.

For further information, please visit www.bacnet.org

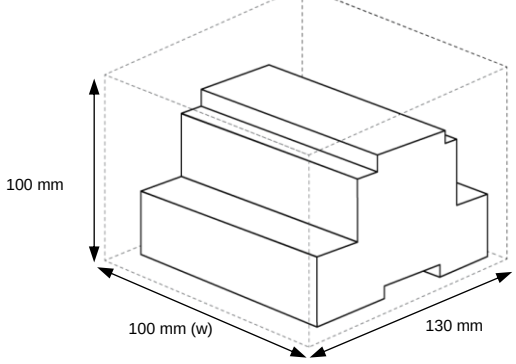
COMMUNICATION

	ASCII		KNX
	Serial	IP	
Connection	EIA485 (3 wire isolated) EIA232 (DB9 connector)	10BASE-T 100BASE-TX	TP-1 +/-
Date rate	1.2, 2.4, 4.8, 9.6, 19.2, 38.4, 57.6 kbps	10 Mbps 100 Mbps	9.6 kbps
Data Types & Functions supported	**Data Types** ASCII strings **Functions** Read Write		DPT_1.x (1 bit) DPT_5.x (1 byte unsigned) DPT_6.x (1 byte signed) DPT_7.x (2 byte unsigned) DPT_8.x (2 byte signed) DPT_9.x (2 byte float) DPT_12.x (4 byte unsigned) DPT_13.x (4 byte signed) DPT_14.x (4 byte float) DPT_20.x (1 byte unsigned)

ELECTRICAL & MECHANICAL FEATURES

Enclosure	Plastic, type PC (UL 94 V-0) Net dimensions (dxwxh): 90x88x56 mm Recommended space for installation (dxwxh): 130x100x100mm Color: Light Grey. RAL 7035
Mounting	Wall. DIN rail EN60715 TH35.
Terminal Wiring (for power supply and low-voltage signals)	Per terminal: solid wires or stranded wires (twisted or with ferrule) 1 core: 0.5mm²… 2.5mm² 2 cores: 0.5mm²… 1.5mm² 3 cores: not permitted If cables are more than 3.05 meters long, Class 2 cable is required.
Power	1 x Plug-in screw terminal block (3 poles) 9 to 36VDC +/-10%, Max.: 140mA. 24VAC +/-10% 50-60Hz, Max.: 127mA Recommended: 24VDC
Ethernet	1 x Ethernet 10/100 Mbps RJ45 2 x Ethernet LED: port link and activity
Port A	1 x KNX TP-1 Plug-in screw terminal block orange (2 poles) 2500VDC isolation from other ports KNX power consumption: 5mA Voltage rating: 29VDC 1 x Plug-in screw terminal block green (2 poles) Reserved for future use 1500VDC isolation from other ports
Switch A (SWA)	1 x DIP-Switch for PORT A configuration: Reserved for future use
PORT B	1 x Serial EIA232 (SUB-D9 male connector) 1 x Serial EIA485 Plug-in screw terminal block (3 poles) A, B, SG (Reference ground or shield) 1500VDC isolation from other ports *(except PORT B: EIA232)*
Switch B (SWB)	1 x DIP-Switch for serial EIA485 configuration: Position 1: **ON:** 120 Ω termination active **Off:** 120 Ω termination inactive (default) Position 2-3: **ON:** Polarization active (default) **Off:** Polarization inactive

Battery	Size: Coin 20mm x 3.2mm Capacity: 3V / 225mAh Type: Manganese Dioxide Lithium
Console Port	Mini Type-B USB 2.0 compliant 1500VDC isolation
USB port	Type-A USB 2.0 compliant Only for USB flash storage device *(USB pen drive)* Power consumption limited to 150mA *(HDD connection not allowed)*
Push Button	Button A: KNX programming button (not used) Button B: Not used
Operation Temperature	0°C to +60°C
Operational Humidity	5 to 95%, no condensation
Protection	IP20 (IEC60529)
LED Indicators	10 x Onboard LED indicators 2 x Run (Power)/Error 2 x Ethernet Link/Speed 2 x Port A TX/RX 2 x Port B TX/RX 1 x Button A indicator 1 x Button B indicator



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