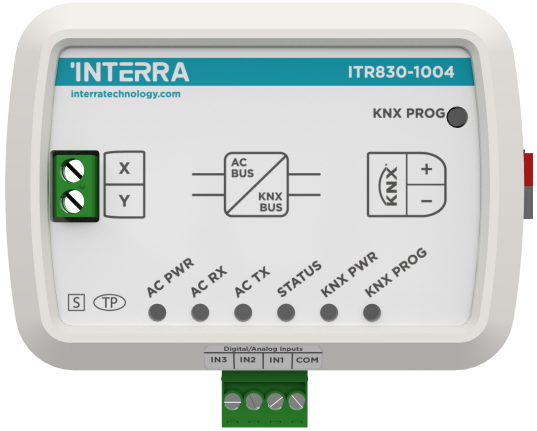
Mitsubishi Heavy Industries
AC - KNX Gateway



Product Code	ITR830-X004
Power Supply	KNX Power Supply
Current Consumption	5 mA
Push Buttons	1 x KNX Programming Button
LED Indicators	1 x KNX Programming LED
Type of Protection	IP 20
Cable Distance	Max 350
Mode of Commissioning	S-Mode
Maximum Air Humidity	< 90 RH
Temperature Range	Operation (-10°C…70°C) Storage (-25°C…100°C)
Colour	Light Grey
Dimensions	88 x 62 x 27 mm (W x H x D)
Certification	KNX Certificate
Configuration	Configuration with ETS

DESCRIPTION

ITR830-X004 is used for monitoring and controlling all the functioning parameters of Mitsubishi Heavy air conditioners with KNX.

ITR830-X004 has easy installation feature. It can be installed inside the own AC indoor unit, it connects one side directly to the electronic circuit of the AC indoor unit (cable supplied) and on the other side directly to the KNX bus.

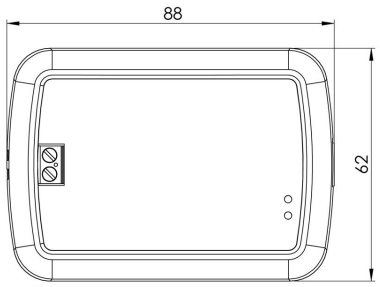
ITR830-$X_1$004		
X_1	**0:** No Digital Input	**1:** Digital Input

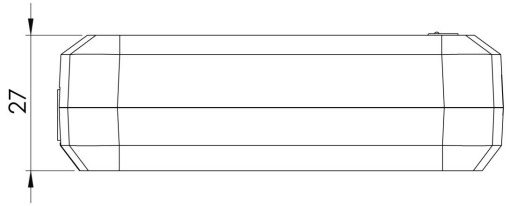
FUNCTIONS

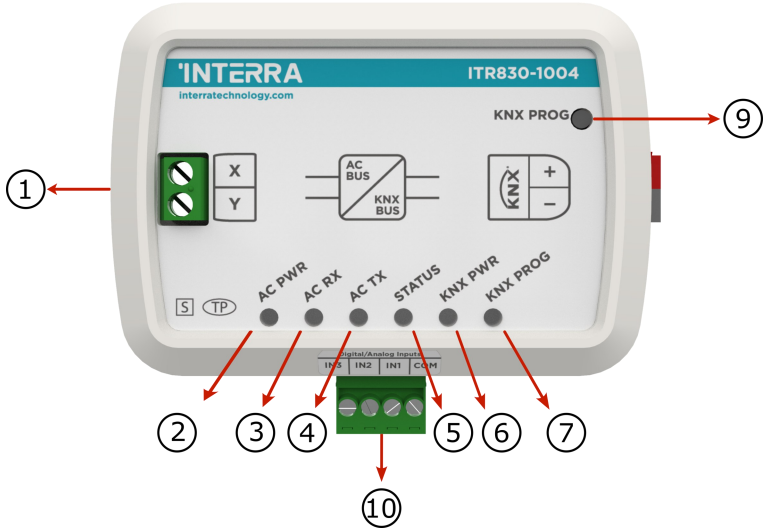
- ITR830-X004 device, provides complete bi-directional integration of Mitsubishi Heavy AC with KNX bus.
- The device provides extra communication objects for giving maximum flexibility.
- Includes 4 logical and 8 converter advanced parameters for energy savings, configurable scenes, temperature limits etc.
- The AC unit provides error notifications for errors that may occur in exceptional cases.
- An ambient temperature value is provided to the Air Conditioner Unit. The temperature value can be acquired from the Temperature input of the AC Gateway or, alternatively, through a KNX object from other KNX devices.*
- Via 3 digital inputs, external devices can be connected.*

DIMENSIONS & CONNECTION DIAGRAM

- *All values given in the device dimensions are millimetres.*







No	Feature	No	Feature
1	AC Indoor Unit connection	8	KNX Connector
2	AC Power indicator LED	9	KNX Programming Button
3	AC Receive Communication LED	10	Digital/Analog Inputs Connector*
4	AC Transmit Communication LED		
5	Status LED		
6	KNX Power indicator LED		
7	KNX Programming LED		

*: Input 1 - This input can be used for external temperature. If not set parametrically, it can be used as a digital input.

Gateway - Single Indoor Unit:

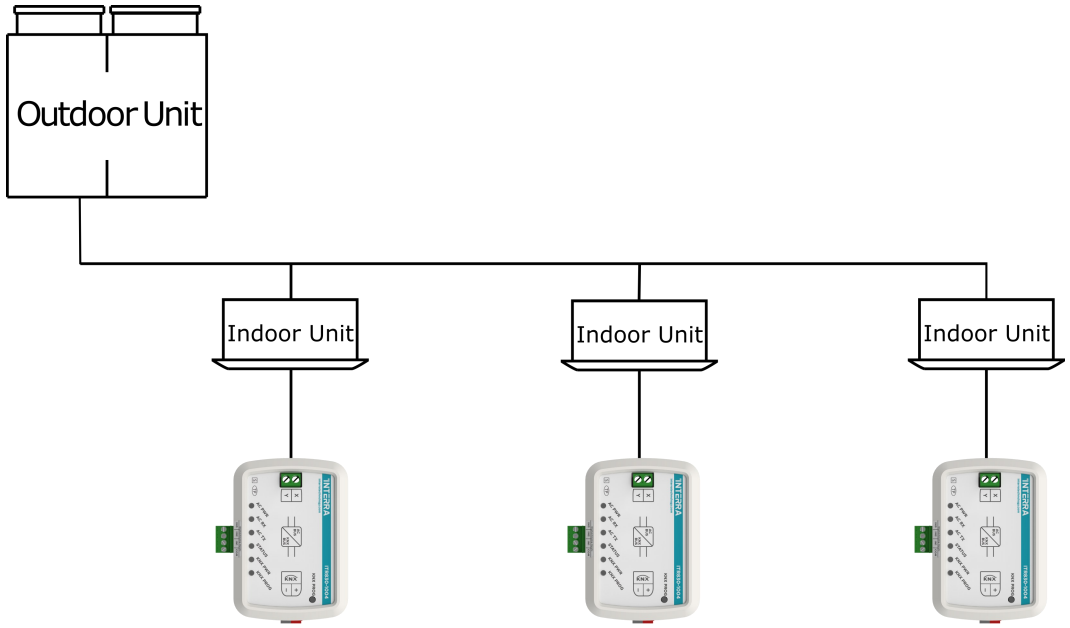


Figure 1

Gateway - Single Indoor Unit + Remote Controller:

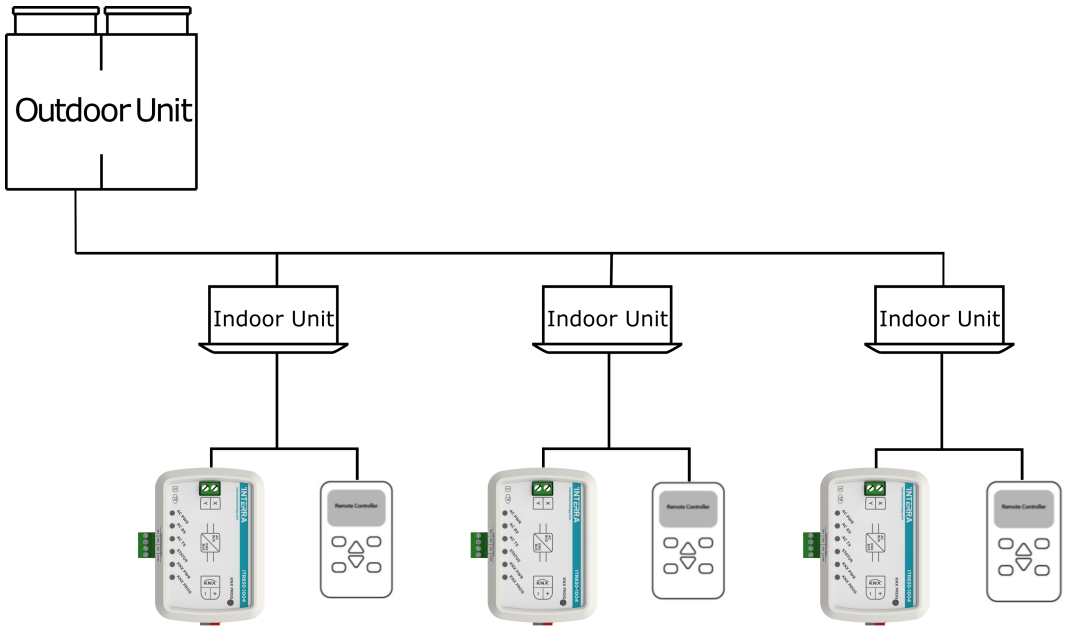


Figure 2

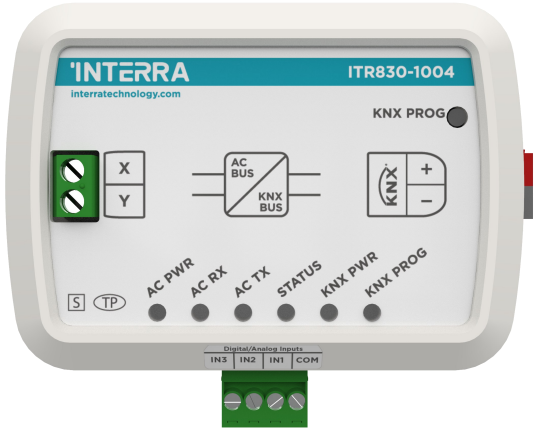
Mitsubishi Heavy AC - KNX Gateway can be connected directly to the wired remote communication bus terminal of the AC indoor unit. Nothing that needs to do in ETS software. The following figure shows the Mitsubishi Heavy AC - KNX Gateway connection without the remote controller. At this case the gateway's role must be master.

- The wired remote controller is optional in this configuration.
- Either one of wired controllers can be set as the master wired controller and the other as the slave wired controller
- If gateway is master, the wired remote must be slave.
- If the wired remote is master, gateway must be slave. At this case ambient temperature reference can not selected from "KNX Bus".

MARKS

CE: The device complies with Electromagnetic Compatibility Directive (2014/30/EU), Low Voltage Directive (2014/35/EU) and Restricting the Use of Hazardous Substances Directive (2011/65/EU).
Tests carried out according to,
EN 50491-2, EN 50065-2-2, EN IEC 63044-3 and EN IEC 63044-5-3 standards.

Mitsubishi Heavy Industries
AC - KNX Arabirimi



Ürün Kodu	ITR830-X004
Güç Kaynağı	KNX Güç Kaynağı
Akım Tüketimi	5 mA
Basmalı Butonlar	1 x KNX Programlama Butonu
LED Göstergeler	1 x KNX Programlama LED'i
Koruma Tipi	IP 20
Kablo mesafesi	Max 350 m
İşletme Modu	S Modu
Maksimum Nem Oranı	< 90 RH
Sıcaklık Aralığı	Çalışma (-10°C…70°C) Depolama (-25°C…100°C)
Renk	Açık Gri
Boyutlar	88 x 62 x 27 mm (W x H x D)
Sertifika	KNX Sertifikası
Yapılandırma	ETS ile Yapılandırma

AÇIKLAMA

ITR830-X004, Mitsubishi Heavy klima cihazlarının KNX'li tüm fonksiyon parametrelerini izlemek ve kontrol etmek için kullanılır.

ITR830-X004 Mitsubishi Heavy AC-KNX arabirimi kolay kurulum özelliğine sahiptir. Kurulum yapılacak olan klimanın kendi AC iç ünitesinin içine monte edilebilmekte, Bir tarafı doğrudan AC iç ünitenin elektronik devresine (verilen kablo) diğer tarafı da doğrudan KNX veriyoluna bağlanarak kurulum yapılmaktadır.

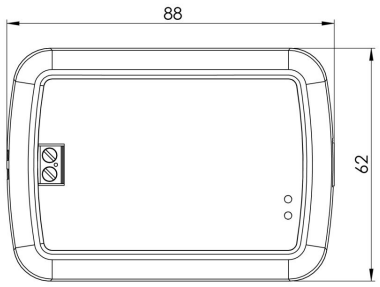
ITR830-$X_1$004		
X_1	**0:** Dijital Giriş Yok	**1:** Dijital Giriş Var

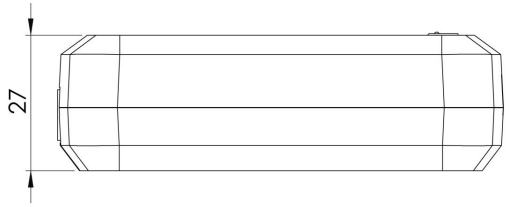
FONKSİYONLAR

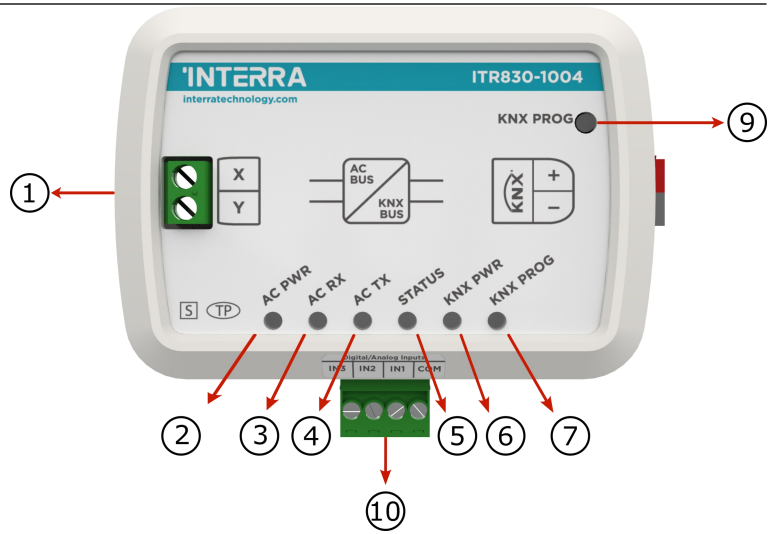
- ITR830-X004 cihazı, Mitsubishi Heavy AC – KNX veri yolları arasında çift yönlü iletişim entegrasyonunu sağlayabilmektedir.
- Cihaz, yüksek seviyede esneklik sağlamak için ekstra iletişim objeleri bulundurmaktadır.
- Cihazın enerji tasarrufu, yapılandırılabilir senaryolar, sıcaklık limitleri vb. için 4 mantıksal ve 8 dönüştürücü gelişmiş parametreleri içermektedir.
- İstisna durumlarda oluşabilecek hatalar için AC ünitesi hata bildirimleri bulundurmaktadır.
- Klima Ünitesine bir ortam sıcaklığı değeri sağlanır. Sıcaklık değeri, AC Gateway'in Sıcaklık girişinden veya alternatif olarak diğer KNX cihazlarından bir KNX nesnesi aracılığıyla alınabilir. *
- 3 dijital giriş üzerinden harici cihazlar bağlanabilir.*

BOYUTLAR & BAĞLANTI DİYAGRAMI

- *Cihaz ölçümünde verilen tüm değerler milimetredir.*



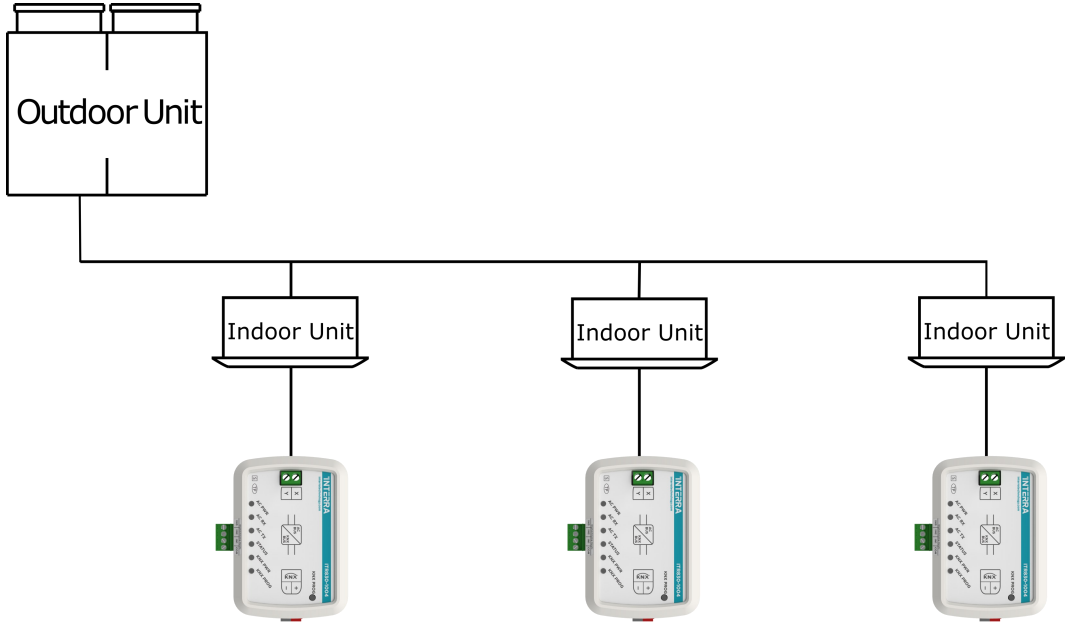




No	Açıklama	No	Açıklama
1	AC İç Ünite Bağlantısı	8	KNX Konnektörü
2	AC Güç LED'i	9	KNX Programlama Butonu
3	AC Receive Sinyal LED'i	10	Dijital/Analog Giriş Bağlantısı *
4	AC Transmit Sinyal LED'i		
5	Durum LED'i		
6	KNX Güç LED'i		
7	KNX Programlama LED'i		

***:** Giriş 1 - Bu giriş dış sıcaklık için kullanılabilir. Parametrik olarak ayarlanmadığı takdirde dijital giriş olarak kullanılabilir.

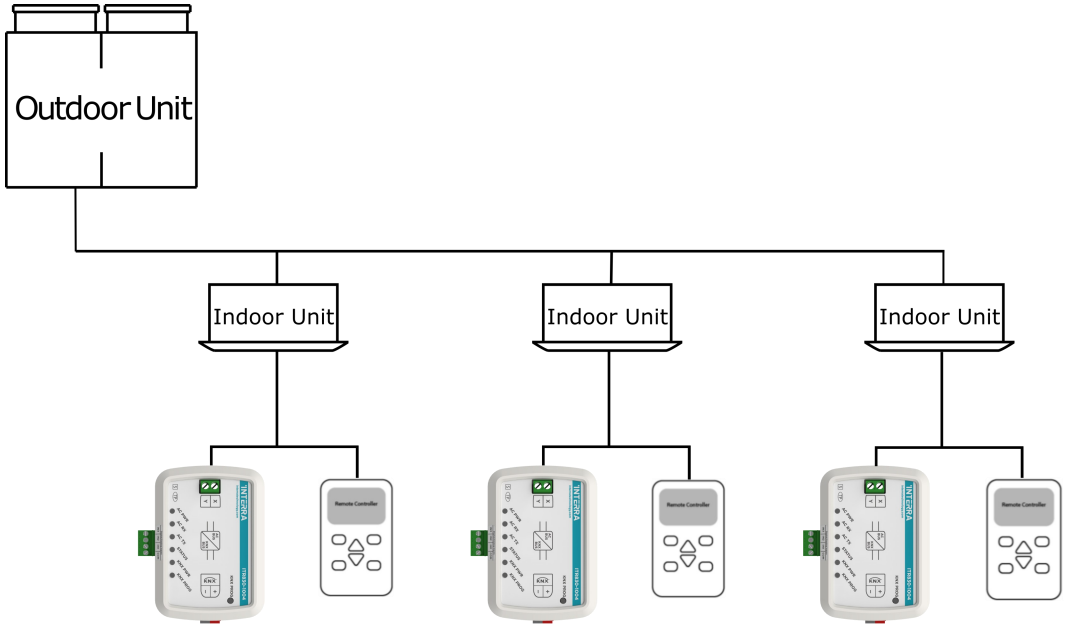
Gateway - Tekli İç Ünite Bağlantısı:



Şekil 1

Mitsubishi Heavy AC - KNX Gateway AC - KNX Gateway, AC iç ünitesinin kablolu uzaktan iletişim veri yolu terminaline doğrudan bağlanabilir. ETS yazılımında yapılması gereken bir şey yoktur. Aşağıdaki şekil, uzaktan kumanda olmadan Mitsubishi Heavy AC - KNX Gateway bağlantısını göstermektedir. Bu durumda Gateway (Arabirim) rolü “Master” olmalıdır.

Gateway-Tekli İç Ünite + Kablolu Kumanda Bağlantısı:



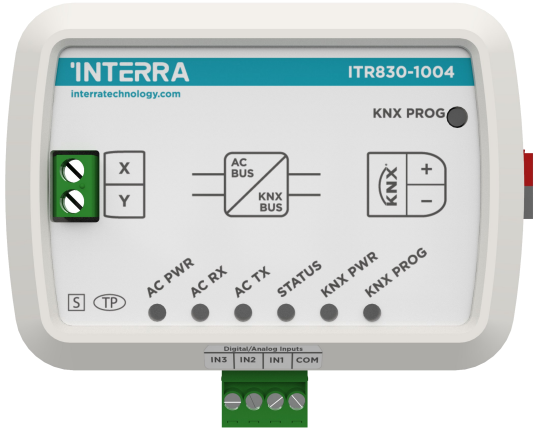
Şekil 2

- Kablolu kumanda bu bağlantıda isteğe bağlıdır.
- Kablolu kumandalardan biri “Master” kablolu kontrolör, diğeri “Slave” kablolu kumanda olarak ayarlanabilir
- Arabirim “Master” ise, kablolu kumanda “Slave” olmalıdır.
- Kablolu kumanda “master” ise, arabirim “Slave” olmalıdır. Bu durumda ortam sıcaklığı referansı "KNX Bus"tan seçilemez.

STANDARTLAR

CE: Cihaz, Elektromanyetik Uyumluluk Direktifi (2014/30/EU), Alçak Gerilim Direktifi (2014/35/EU) ve Tehlikeli Maddelerin Kullanımını Kısıtlama Direktifi (2011/65/EU) ile uyumludur.
Buna göre yapılan testler,
EN 50491-2, EN 50065-2-2, EN IEC 63044-3 ve EN IEC 63044-5-3 standardları.

Mitsubishi Heavy Industries
AC - KNX Gateway



Produktcode	ITR830-X004
Stromversorgung	KNX-Stromversorgung
Derzeitiger Verbrauch	5 mA
Drück Knöpfe	1 x KNX Programmiertaste
LED Anzeigen	1 x KNX Programmierbare LED
Art des Schutzes	IP 20
Kabelentfernung	Maximal 350
Art der Inbetriebnahme	S-Modus
Maximale Luftfeuchtigkeit	< 90 RH
Temperaturbereich	Betrieb (-10°C…70°C) Lagerung (-25°C…100°C)
Farbe	Hellgrau
Maße	88 x 62 x 27 mm (B x H x T)
Zertifikat	KNX-Zertifikat
Aufbau	Konfiguration mit ETS

BESCHREIBUNG

ITR830-X004 dient zur Überwachung und Steuerung aller Funktionsparameter von Mitsubishi Heavy Port Air-Conditioners mit KNX. ITR830-X004 verfügt über eine einfache Installationsfunktion. Die Installation erfolgt, indem eine Seite direkt an die elektronische Schaltung des AC-Innengeräts (Kabel im Lieferumfang enthalten) und die andere Seite direkt an den KNX-Bus angeschlossen wird.

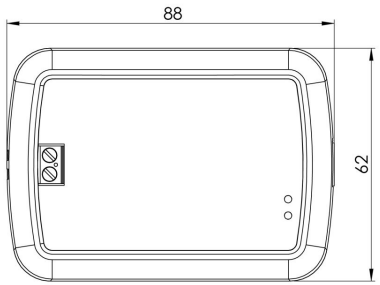
ITR830-$X_1$004	
X_1	**0:** Kein digitaler Eingang **1:** Digitaler Eingang

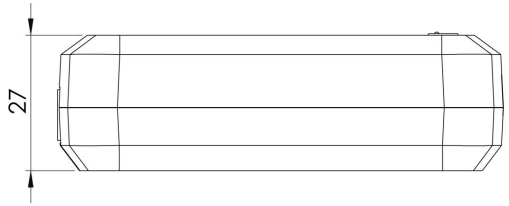
FUNKTIONEN

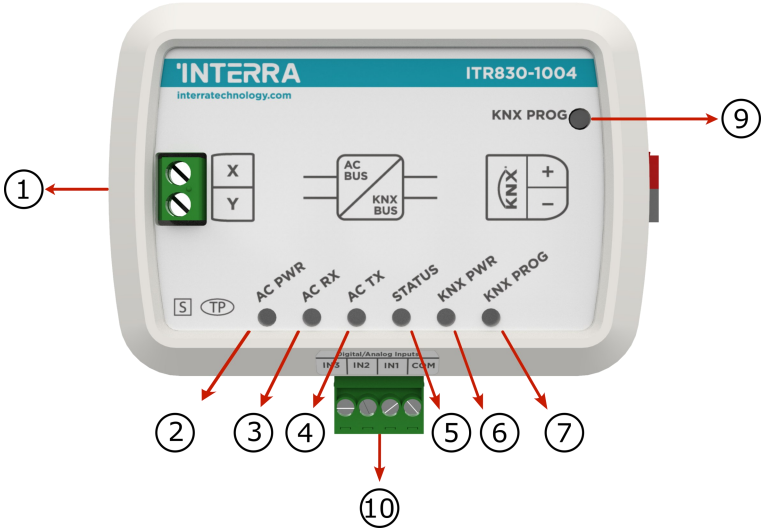
- Das ITR830-X004 Gerät bietet eine vollständige bidirektionale Integration von Mitsubishi Heavy AC in den KNX-Bus.
- Das Gerät bietet zusätzliche Kommunikationsobjekte für maximale Flexibilität.
- Enthält 4 logische und 8 erweiterte Konverter Parameter für Energieeinsparungen, konfigurierbare Szenen, Temperaturgrenzen usw.
- Das AC-Gerät bietet Fehlerbenachrichtigungen für Fehler, die in Ausnahmefällen auftreten können.
- Der Klimaanlage wird ein Umgebungstemperaturwert zur Verfügung gestellt. Der Temperaturwert kann vom Temperatureingang des AC Gateway oder alternativ über ein KNX-Objekt von anderen KNX-Geräten erfasst werden.*
- Über 3 digitale Eingänge können externe Geräte angeschlossen werden.*

ABMESSUNGEN & ANSCHLUSSDIAGRAMM

- *Alle in den Geräteabmessungen angegebenen Werte sind Millimeter.*







No	Feature
1	AC-Anschluss des Innengeräts
2	AC Power LED
3	AC-Empfangssignal LED
4	AC-Signal LED senden
5	Status LED
6	KNX Power LED
7	KNX Programmierbare LED

No	Feature
8	KNX-Anschluss
9	KNX-Programmiertaste
10	Digitaler/Analoger Eingangsanschluss*

*: Eingang 1 - Dieser Eingang kann für die externe Temperatur verwendet werden. Wenn er nicht parametriert ist, kann er als Digitaleingang verwendet werden.

Gateway - Einzelne Inneneinheit:

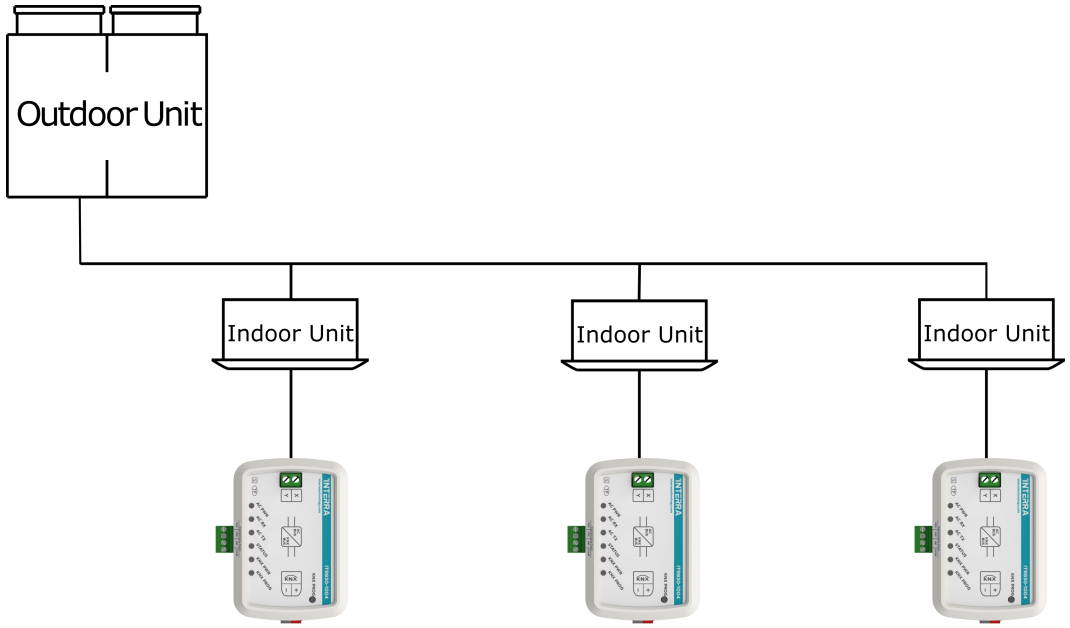


Abbildung 1

Mitsubishi Heavy AC - KNX Gateway kann direkt an den kabelgebundenen Fernkommunikationsbusanschluss der AC-Inneneinheit angeschlossen werden. In der ETS-Software muss nichts gemacht werden. Die folgende Abbildung zeigt die Verbindung des Mitsubishi Heavy AC - KNX Gateway ohne die Fernbedienung. In diesem Fall muss die Rolle des Gateways Master sein.

Gateway - Einzelne Inneneinheit + Fernbedienung:

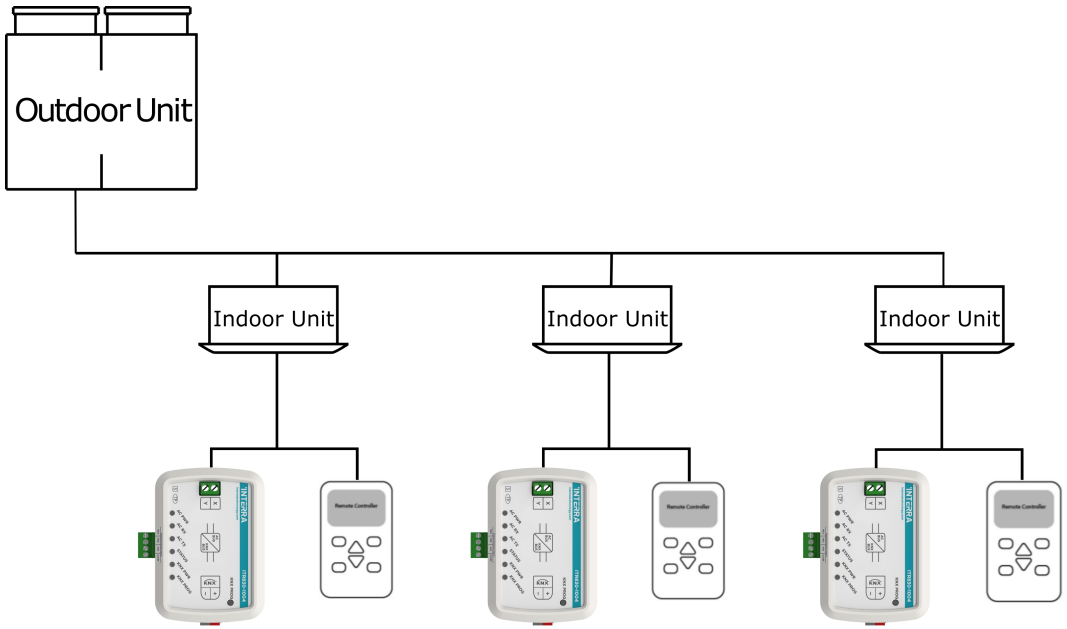


Abbildung 2

- Die kabelgebundene Fernbedienung ist in dieser Konfiguration optional.
- Eine der kabelgebundenen Controller kann als Master-Kabelcontroller eingestellt werden, während der andere als Slave-Kabelcontroller fungiert.
- Wenn das Gateway als Master konfiguriert ist, muss die kabelgebundene Fernbedienung als Slave fungieren.
- Wenn die kabelgebundene Fernbedienung als Master konfiguriert ist, muss das Gateway als Slave fungieren. In diesem Fall kann die Umgebungstemperaturreferenz nicht aus dem "KNX-Bus" ausgewählt werden.

STANDARDS

CE: Das Gerät erfüllt die Richtlinie zur elektromagnetischen Verträglichkeit (2014/30/EU), die Niederspannungsrichtlinie (2014/35/EU) und die Richtlinie zur Beschränkung der Verwendung gefährlicher Stoffe (2011/65/EU).
Die Tests wurden entsprechend durchgeführt,
Die Normen EN 50491-2, EN 50065-2-2, EN IEC 63044-3 und EN IEC 63044-5-3.