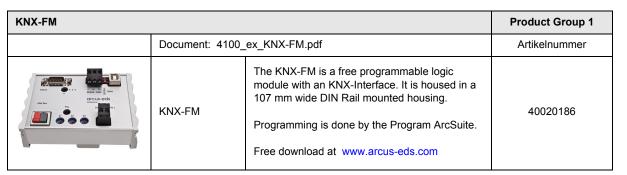
# **Application Description**KNX-FM Functions Modul





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## 1.1 Application Description

### **Operating Principals and Areas of Application**

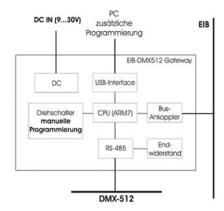
The KNX-FM Modul is a logic module, which is used in EIB / KNX Systems. It is characterized by the free programming in the forth language interpreter. The 50 MHz Arm processor allows fast 32-bit integer operations and 64-bit floating point calculations. A self-compiling command interpreter produces fast and compact code. Additionally, the module KNX-FM contains programmable control and display elements.

The KNX-FM delivered an RS232 and an RS485 interface (DMX).

### **Functions**

- · 8 kB of RAM memory for programs and data
- 16 programmable timer with 1 / 100 sec resolution
- · programs and data can be permanently stored in flash
- 1 button for starting a specific user-defined function
- · Specially adapted for functions EIB / KNX communication elements user, date and time
- Documented processor interfaces for individual EIB / KNX solutions ( 2x serial interface ). There to is Microcontroller knowledge required.
- supply via USB or EIB / KNX, auxiliary voltage required
- · Programming on the ArcSuite software

### **Functional Diagram**



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# **Application Description** KNX-FM Functions Modul



# 1.2 Initial Operation

Connections	Pin	Belegung	
Clamp RS 485 / DMX	Ground D - D +	GND (0V) Data - (B) Data + (A)	Screw clamp are included
D-Sub 9-pol male RS232	Pin 2 Pin 3 Pin 5	RxD TxD GND	
Clamp DC IN ( 9 30V )	minus plus	0V VDC 930V VDC	Screw clamp are included
Clamp KNX-Bus			Clamp block KNX are included



Switch the power supply on.

The switches **S1,S2** and **S3** and the Pushbutton **T1** can be freely programmed.

The physical address is programmed with the ETS through a dummy application using the ( Prg ) button.

Using the Jumper  ${\bf J1}$  (  ${\bf 120R\ TERM}$  ) the RS485 Bus is set with a 120 Ohm load resistor.

The KNX Bus is galvanically separated from the serial connectors.

The power supply is galvanically separated from the serial connectors and the KNX Bus.











# **Application Description** KNX-FM Functions Modul



# 1.3 Technical Data

Dimensions	Inside 92 x 71 x 24 mm Outside 107 x 75 x 31 mm
Protection Class	IP20
Mounting	Rail Mounted Device (6 TE)
Temperature Range	-5 °C 45 °C
Controls	3 16-level Rotary Switch 1 Button User 2 LED User 1 EIB Button+LED
KNX-Connection	KNX-Clamp Block
KNX-Supply	20 32VDC / ca. 150mW
DMX-Connector	3x Screw clamp 0,8mm <sup>2</sup>
Terminating Resistor RS485	120 Ohm via Jumper
Forth - Programmierung	USB-Slot with PC-Software Arcsuite ( Nur Forth-Anwender, für zusätzliche Tools )
Power Supply	9 30VDC, 100mA internal galvanically separated polarized defect-proof
RS485 RS232	250 kBaud, galvanically separated 115.2 kBaud, max







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## **Application Description** KNX-FM Functions Modul



### **Imprint**

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#### Manufacturer



## **Registered Trademarks**



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