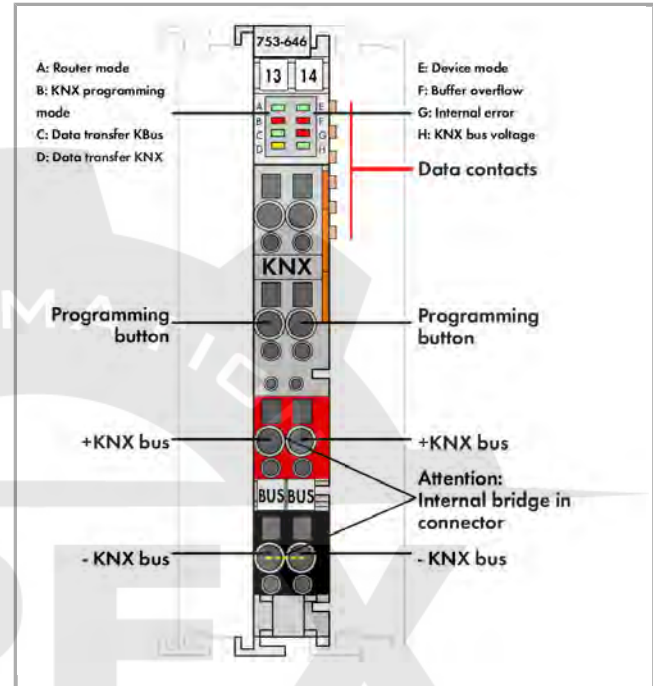
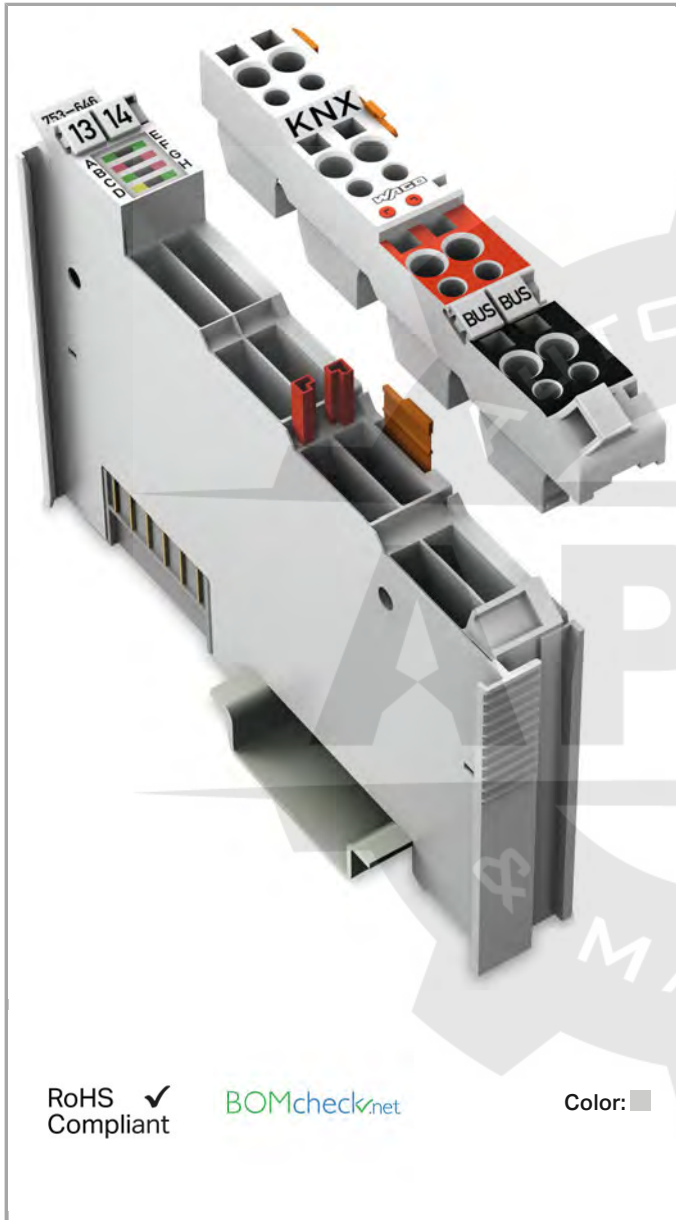
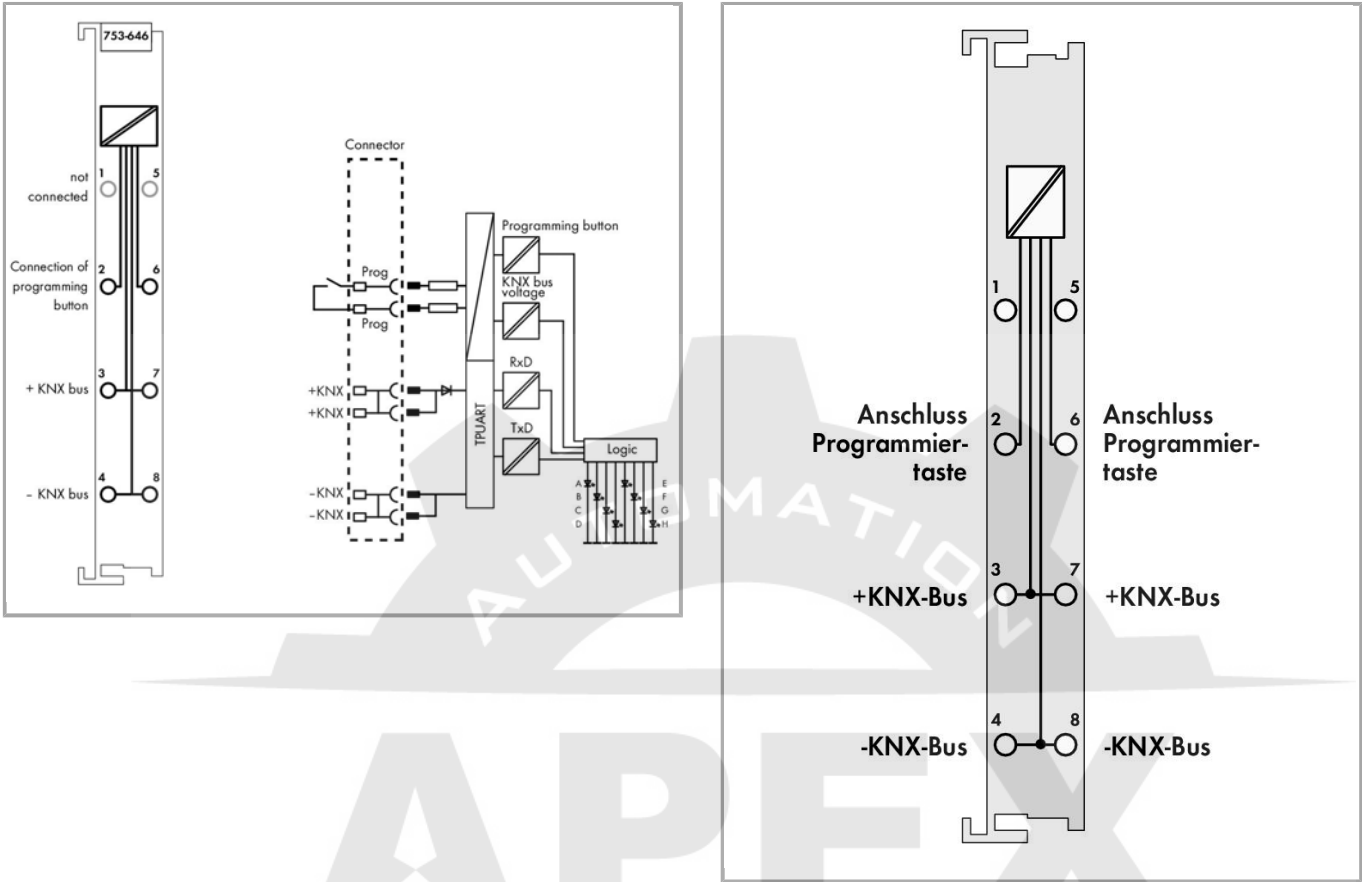




RoHS Compliant

[BOMcheck.net](https://www.bomcheck.net)

Color:



Item description

The 753-646 KNX/EIB/TP1 Module connects to a KNX/EIB/TP1 network. The module supports two different functions:

1. Device mode: With this module, all programmable controllers (*1) that are relevant for building automation can be connected to a KNX/TP1 network. In a KNX network, the module appears as a standard KNX device and is linked via ETS 3 Professional Commissioning Tool. The module supports a maximum of 253 communication objects with any DPTs, 254 group addresses and 254 associations. The application is programmed via WAGO-I/O-PRO CAA. An ETS3 plug-in, which is included in the WAGO product database, is required so that the data from the application program can be allocated to the group addresses.

*1: See Documentation WAGO-I/O-SYSTEM 753 Specialty Modules KNX/EIB/TP1 Module – Device Mode

2. Router mode: When the 750-849 or 750-889 KNX IP Controller is connected to the first 753-646 KNX/EIB/TP1 Module, the device can be used as a KNXnet/IP router. The module is switched to router mode automatically. An application program is not required for operation in router mode. Additional modules that are connected to a KNX IP controller are addressed in the device mode by the application.

WAGO's 753 Series Pluggable Connector with internally bridged contacts (3/7 and 4/8) is part of the delivery.

Both an external KNX power supply and ETS 3.0 Professional are required to operate the KNX/EIB/TP1 Module.

Data
Technical Data

Gerätespezifikation	KNX/TP1 bus specification: 1.0
Device-specific	Number of group addresses: 254; Number of communication

objects: 253; Number of associations: 254

Current consumption typ.	5 mA (KNX)
Baud rate	9.6 kBd (KNX)
Bit width	24 bytes
Power supply	KNX: über KNX-Netzteil
Commissioning	WAGO-I/O-PRO V2.3
Advanced diagnostics	via FbKNX_Master_646 function block (device mode)
System supply voltage	DC 5 V; via data contacts
Current consumption, system supply (5 V)	25 mA
System and sensor supply voltage	)
Isolation	2.5 kV rms

Connection data

Connection technology: In-/Outputs	8 x CAGE CLAMP®
Connection type (1)	Inputs/Outputs
Solid conductor	0.08 2.5 mm² / 28 14 AWG
Fine-stranded conductor	0.08 2.5 mm² / 28 14 AWG
Strip length	9 10 mm / 0.35 0.39 inch
Anschlusspunkt Sonstiges Bezeichnung	Programmiertaste; Brücke 2/6

Geometrical Data

Width	12 mm / 0.472 inch
Height	69 mm / 2.717 inch
Height from upper-edge of DIN-35 rail	61.8 mm / 2.433 inch
Depth	100 mm / 3.937 inch

Mechanical data

Type of mounting	DIN-35 rail
Pluggable connector	yes

Material Data

Color	light gray
Housing material	Polycarbonate, polyamide 6.6
Weight	55.9 g
Conformity marking	CE

Environmental Requirements

Surrounding air (operating) temperature	0 55 °C
Surrounding air (storage) temperature	-40 85 °C

Protection class	IP20
Degree of pollution (5)	2 per IEC 61131-2
Operating altitude	0 2000 m
Mounting position	horizontal (standing/lying) or vertical
Relative air humidity (no condensation)	95 %
Vibration resistance	4g per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-3, marine applications
Exposure to pollutants	Per IEC 60068-2-42 and IEC 60068-2-43
Permissible H ₂ S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO ₂ contaminant concentration at a relative humidity 75 %	25 ppm

Commercial data

Product Group	15 (Remote I/O)
Country of origin	DE
GTIN	4045454778033
Customs Tariff No.	85389099990

Approvals / Certificates

Radio-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	KC National Radio Research Agency	Article 58-2, Clause 3	MSIP- REM-W43- MSM750

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19- HG1821926
	BV Bureau Veritas S.A.	-	30389/B0 BV
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAA0000194



GL
Germanischer Lloyd

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59 627 - 08
HH



KC
National Radio Research Agency

Article 58-2, Clause 3

MSIP-REM-
W43-MSM750



LR
Lloyds Register

-

02/20026 (E5)



NK
Nippon Kaiji Kyokai

-

TA17255M



PRS
Polski Rejestr Statkow

-

TE/1989
/880590/13



RINA
RINA Germany GmbH

-

ELE134212XG

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19- HG1821926
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAA0000194
	LR Lloyds Register	-	02/20026 (E6)
	NK Nippon Kaiji Kyokai	-	TA17255M



PRS
Polski Rejestr Statków

-

TE/2236
/880590/19



RINA
RINA Germany GmbH

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ELE066419XG



Other Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Netherlands B.V. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.1 (ORDINARY LOCATIONS)

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Netherlands B.V. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.1

Compatible products

Carrier rail

	Item no.: 210-112 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm	210-112
	Item no.: 210-113 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715	210-113
	Item no.: 210-114 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715	210-114
	Item no.: 210-115 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm	210-115
	Item no.: 210-118 Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715	210-118

	Item no.: 210-196 Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	210-196
	Item no.: 210-197 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715	210-197
	Item no.: 210-198 Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored	210-198
	Item no.: 210-504 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715	210-504
	Item no.: 210-505 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715	210-505
	Item no.: 210-506 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715	210-506
	Item no.: 210-508 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715	210-508
Marking accessories		
	Item no.: 2009-145 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; white	2009-145
	Item no.: 2009-145/000-002 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; yellow	2009-145 /000-002
	Item no.: 2009-145/000-005 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; red	2009-145 /000-005
	Item no.: 2009-145/000-006 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; blue	2009-145 /000-006
	Item no.: 2009-145/000-007 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; gray	2009-145 /000-007
	Item no.: 2009-145/000-012 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; orange	2009-145 /000-012
	Item no.: 2009-145/000-023 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; green	2009-145 /000-023
	Item no.: 2009-145/000-024 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; violet	2009-145 /000-024
	Item no.: 248-501 Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card	248-501

**Item no.: 248-501/000-002**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow

/000-002

248-501

**Item no.: 248-501/000-005**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

/000-005

248-501

**Item no.: 248-501/000-006**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

/000-006

248-501

**Item no.: 248-501/000-007**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

/000-007

248-501

**Item no.: 248-501/000-012**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

/000-012

248-501

**Item no.: 248-501/000-017**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

/000-017

248-501

**Item no.: 248-501/000-023**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

/000-023

248-501

**Item no.: 248-501/000-024**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

/000-024

248-501

**Item no.: 709-198**

Marking strips

709-198

**Item no.: 750-103**

Group marker carrier

750-103

**Item no.: 750-107**

Group marker carrier

750-107

pluggable wiring tier**Item no.: 753-150**

753 Series coding elements; red

753-150

system box**Item no.: 850-804**

IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 4 x M20, 16 x M16, 28 x M12 cable grip

850-804

**Item no.: 850-804/000-001**

IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 2 x M20, 13 x M16, 32 x M12 cable grip

/000-001

850-804

**Item no.: 850-805**

IP65 enclosure; Stainless steel; WxHxD (600x123x200 mm); 4 x M20, 19 x M16, 67 x M12 cable grip

850-805

**Item no.: 850-814/002-000**

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate

/002-000

850-814

**Item no.: 850-815/002-000**

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate

/002-000

850-815

**Item no.: 850-816/002-000**

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate

/002-000

850-816

**Item no.: 850-817/002-000**

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate

/002-000

850-817

**Item no.: 850-825**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20

850-825

**Item no.: 850-826**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

850-826

**Item no.: 850-826/002-000**

IP65 enclosure; Aluminium (RAL 7035); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

/002-000

850-826

**Item no.: 850-827**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip

850-827

**Item no.: 850-827/002-000**

IP65 enclosure; Aluminium (RAL 7035); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip

/002-000

850-827

**Item no.: 850-828**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip

850-828

**Item no.: 850-828/002-000**

IP65 enclosure; Aluminium (RAL 7035); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip

/002-000

850-828

**Item no.: 850-834**

IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20

850-834

**Item no.: 850-835**

IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

850-835

**Item no.: 850-836**

IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip

850-836

shield connection**Item no.: 790-108**

Shield clamping saddle; 11 mm wide; diameter of compatible conductor

790-108

**Item no.: 790-116**

Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm

790-116

	Item no.: 790-124 Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm	790-124
	Item no.: 790-140 Shield clamping saddle; diameter of compatible conductor	790-140
	Item no.: 790-208 Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm	790-208
	Item no.: 790-216 Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm	790-216
	Item no.: 790-220 Shield clamping saddle; 30 mm wide; 6 ... 20 mm	790-220

Downloads

Documentation

Manual

KNX/EIB/TP1 Module Device mode	V 1.2.0	pdf 1.4 MB	Download
KNX/EIB/TP1 Module Router mode	V 1.1.0	pdf 1.9 MB	Download
WAGO ETS Plug-in (Product Data Base) for configuring WAGO KNX devices	V 3.0.1	pdf 2.9 MB	Download

Bid Text

753-646 IO, 753	Apr 4, 2012	doc 31.2 kB	Download
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Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 265.8 kB	Download
WAGO KNX Concept WAGO KNX Concept	V 1.1.1	pdf 3.1 MB	Download

System Description

Design Notes Basic conditions and recommendations for higher operational safety	V 2.0.0	pdf 1.5 MB	Download
750/753 Series I/O-System – General Product Information		pdf 1.7 MB	Download
Use in Hazardous Environments Term definition, marking and installation regulations	V 1.0.0	pdf 1.0 MB	Download

Overview on WAGO I/O-SYSTEM 750 approvals

pdf
780.2 kB

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Application Notes

Application Note CoDeSys 2.3

Application Note ThebenKNX_DALI	Aug 25, 2016	zip	Download
Connecting the Theben thePrema P360 KNX Presence Detector to the WAGO I/O-System		745.2 kB	

KNX Funktionsmakros	Feb 2, 2017	zip	Download
Basierend auf der Bibliothek KNX_02.lib, stellt WAGO im Bereich Gebäudeautomation verschieden Funktionsmakros zur Verfügung.		110.0 MB	

Application Note KNX StarterKit3	Nov 13, 2014	zip	Download
This Application Note includes the commissioning instructions for the KNX IP StarterKit 3.		30.9 MB	

Application Note Library KNX_02.lib	Nov 9, 2016	zip	Download
This quick start guide outlines the necessary steps for creating an application with the KNX/EIB/TP1 module.		726.8 kB	

Application Note e!COCKPIT

eCOCKPIT application note WagoAppKNX	2018-01-23	pdf	Download
This quick start guide outlines the necessary steps for creating an application with the KNX/EIB/TP1 module.	Jan 23, 2018	1.2 MB	

Libraries

Library

Libraries for Building Automation CODESYS 2.3	2019-08-13	zip	Download
This zip file contains WAGO I / O PRO libraries for building automation. Blocks are available for the following applications: - DALI - DALI sensors - DALI Color Control - DALI Emergency Lighting - Enocean - SMI - HVAC / HVAC functions - General building functions such as blinds, dimmers, impulse switches - Scheduler - KNX function blocks - BACnet - WINSTA blind box - DMX - Elsner weather station - M-Bus, MBus - MP-Bus, MPBus - Romutec handset - Thermokon Thanos room thermostat - Thermokon WRF04 room thermostat - Thermokon WRF06 room thermostat - Thermokon WRF07 room thermostat - Thermokon WRF08 room thermostat - 3-phase Power measuring module 750-493 - LON - Grundfos pumps with GENIbus interface - EAP Modbus® room control units - Conversion of color formats - "robutecheasy" modules - Schüco TipTronic group control units - Weather station Thies	Aug 13, 2019	75.4 MB	

e!COCKPIT libraries



e!COCKPIT Bibliotheksbeschreibung WagoAppKNX

pdf
1.5 MB[Download](#)

Engineering-Software

Product database

WAGO Produktdatenbank für die KNX Klemme 753-646 inklusive des WAGO-ETS-Plug-In	2.0.367.581 Jun 2, 2015	zip 2.3 MB	Download
WAGO Produktdatenbank für den KNX Router 750-889 / 750-849 + 753-646 inklusive des WAGO-ETS-Plug-In	2.0.373.598 Jun 12, 2014	zip 42.1 kB	Download

CAD/CAE - Smart Data

CAD data

3D Download 753-646	URL	Download
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EPLAN

EPLAN Data Portal	Download
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WSCAD

WSCAD Universe	Download
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Product family

750/753 Series I/O-System
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Subject to changes.