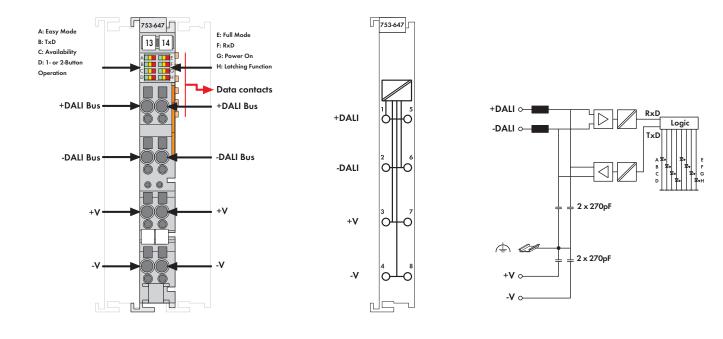
DALI Multi-Master Module





The 753-647 DALI Multi-Master Module complies with DALI standard according to IEC 62386. This manufacturer-independent protocol ensures interoperability of DALI devices in lighting applications.

devices in lighting applications. The 1/2 inch (12 mm) wide module is a DALI interface used in combination with WAGO 750 Series Controllers and Modules (e.g., BACnet, KNX, EnOcean, LON, MODBUS). Each DALI Multi-Master Module supports 64 addresses for electronic control gears (ECGs) and 64 addresses for DALI sensors. Each DALI ECG can be assigned to 16 groups and 16 scenes. The 753-647 Module also offers 16 additional virtual groups on the DALI bus.

Using the WAGO-I/O-SYSTEM, DALI control devices are seamlessly integrated with all supported BA and fieldbus protocols. Several DALI masters can be connected to a single fieldbus node. The maximum number of modules that can be connected to a controller depends on the memory required by the application. Fieldbus nodes are programmed via WAGO-I/O-PRO software. WAGO provides a comprehensive IEC-61131-3 library of function blocks, simplifying the creation of complex lighting applications.

Description		Item No.	Pack. Unit
DALI Multi-Mast	er Module	753-647	
			Pack.
Accessories		Item No.	Unit
DALI Configurat	or	see page 29 or dov	vnload:
		www.wago.com	
WAGO-I/O-CHE		759-302	1
Commission and		Quick marking system	
Lucincural	plain	248-501	5
all a statements and a statement of the	with marking	see Full Line Catalog	g AUIOMAIION
7526 . 6		2012/2013 753-110	0.5
753 Series Conr	nectors	753-110	25 100
Coding fingers	able connectors and a	oding fingers are included.	100
		Saling inigers are included.	
Approvals			
Conformity markin	ng	CE	
₀®us UL 508		pending	
🐵 EN 60079-0, -	15	pending	
EN 61241-0, -	1		

Alternatively an "Easy Mode" allows lighting functions to be easily controlled without any complicated PLC programming. The 753-647 Module is future-proof and upgradable to the latest DALI release. A comprehensive and easy-to-use commissioning and maintenance tool is available as stand-alone application or as integrated WAGO-I/O-CHECK software component.

The two following power supply options are available for the 753-647 Series: 1. The 753-620 DALI Multi-Master DC/DC Converter is used to supply one single module.

2. The 787-1007 Power Supply is used to supply several modules.

Technical Data	
DALI specification	DIN IEC 62386 only in conjunction with
	753-620 or 787-1007 Power Supplies
Number of slaves (DALI)	addressable:
	64 control devices + 64 control gears
Module power supply at +V and -V	18 V via 753-620 / 787-1007 Power
	Supplies
Transmission channel	1
Technical information acc. to DALI specific	ation
Maximum supply current	250 mA
Guaranteed supply current	200 mA
Current consumption (internal)	30 mA
Power supply	via system voltage (DC/DC)
Isolation	1500 V DC DALI bus/Internal data bus
Internal bit width	24-byte data
Commissioning	via WAGO-I/O-CHECK
Configuration	with WAGO DALI Configurator
Programming	via WAGO-I/O-PRO
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 2.5 mm ² / AWG 28 14
Stripped lengths	9 10 mm / 0.37 in
Width	12 mm
Weight	55 g
EMC: $\mathbf{C}\mathbf{\epsilon}$ - immunity to interference	acc. to EN 61000-6-2 (2005) *
EMC: $\mathbf{C}\mathbf{\epsilon}$ - emission of interference	acc. to EN 61000-6-3 (2007) *
	* Only in conjunction with 753-620 /
	787-1007 DC/DC Converter
EMC: marine applications	
- immunity to interference	acc. to Germanischer Lloyd (2003)
EMC: marine applications	
- emission of interference	acc. to Germanischer Lloyd (2003)

Postfach 2880 - D-32385 Minden Hansastr. 27 - D-32423 Minden Tel.: +49(0)571/887-0 E-Fax: +49(0)571/887-169

E-Mail: info@wago.com www.wago.com

DALI Configurator

The DALI Configurator allows easy commissioning of a DALI network via 753-647 DALI Multi-Master Module. The configurator is available as stand-alone Windows application or for use with WAGO-I/O-CHECK software. It provides the following functions: easy commissioning, configuration, service, support and maintenance of a DALI network. Comprehensive backup & restore features, as well as offline configuration option for the entire DALI network (including ECGs and sensors) are available.

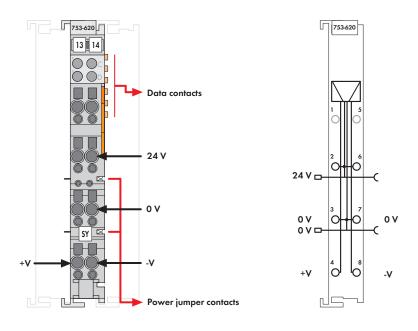
Features:

- Stand-alone software or for use with WAGO-I/O-CHECK
- Commissioning functions:
 - Addressing
 - Formation of scenes and groups
 - Control gear configuration
 - Offline configuration option
- Service, support and maintenance functions:
 - Backup & restore
 - Status messages from defective ECGs/lamps
 - Identification of double addresses
 - Operating hours display
- Windows-conform user interface:
 - Multiple selection for time-optimized configuration
 - Displays network in a clear tree structure
 - Supports different commissioning workflows

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DALI Configurator is available as part of WAGO-I/O-CHECK (Version 3.4.1.9 and higher) or as a stand-alone application (www.wago.com).

DALI Multi-Master DC/DC Converter



Part of the WAGO-I/O-SYSTEM, the 753-620 DALI Multi-Master DC/DC Converter is just $\frac{1}{2}$ inch (12mm) wide. It supplies power to the 753-647 DALI Multi-Master Module and delivers maximum 200mA current to operate a single DALI line. The maximum number of slaves depends on the total power consumption of the single DALI devices.

consumption of the single DALI devices. The 753-620 DC/DC Converter is supplied via 24V power jumper contacts. Cable bridges connect the DC/DC Converter to the DALI Multi-Master Module.

Description		Item No.	Pack. Unit
DALI Multi-Master DC/DC Converter		753-620	1
Accessories		Item No.	Pack. Unit
	Miniature WSB Quic	k markina system	Unir
Green mark	plain	248-501	5
CONTRACTOR OF A	with marking	see Full Line Catalo	g AUTOMATIC
(and a second second	-	2012/2013	-
		753-110	25
753 Series Conne	ectors	/53-110	25
753 Series Conne Coding fingers	ectors	753-110	100
Coding fingers	ectors ble connectors and coding	753-150	
Coding fingers		753-150	

Technical Data	
Voltage via power jumper contacts (max.)	24 VDC
Input voltage range	18 31.2 VDC
Current via power jumper contacts (max.)	10 ADC
Output voltage	18 VDC (at +V and -V)
Nominal output current	200 mA
Short circuit protection	permanent
Test voltage input / output	1.5 kV eff.
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 2.5 mm ² / AWG 28 14
Stripped lengths	9 10 mm / 0.37 in
Width	12 mm
Weight	55 g

787-1007

Power Supply

for 753-647 DALI Multi-Master Module



The 787-1007 Primary Switch Mode Power Supply is specially designed to supply the 753-647 DALI Multi-Master Module. The 787-1007 features a 54mm-wide DIN-rail mount enclosure with input voltage range of 85 to 264VAC (120 - 373VAC). The power supply provides an output voltage of 18VDC and a maximum output current of 1100mA – enough to supply up to five parallel modules. The maximum current per DALI line is limited to 200mA in each DALI Multi-Master Module. • Supplies up to five 753-647 DALI Multi-Master Modules*

- Prepared for class II equipment
- Natural convection cooling when horizontally mounted
 Stage profile, ideal for distribution boards or distribution boxes

Input:	
Nominal input voltage Vi nom	100 240 VAC
Input voltage range	85 264 VAC; 120 373 VDC
Frequency	44 66 Hz; 0 Hz
Input current li	0.6 A at 110 VAC / 0.4 A at 230 VAC
Inrush current	< 30 A, NTC
Mains failure hold-up time	> 10 ms at 110 VAC /
	> 80 ms at 230 VAC
Output:	
Nominal output voltage Vo nom	18 VDC
Output current lo	1.1 A at 18 VDC
	max. 0.8 A (18 VDC) in any mounting
	position
Factory preset	18 VDC
Adjustment accuracy	2 %
Residual ripple	< 150 mV (peak-peak)
Current limitation	1.1 x lo typ.
Overload behavior	Constant current
Operational indication	LED green (Va)
Efficiency / power losses:	• • • • •
Efficiency	80 % typ.
Power loss P _v	3 W (no load) /
•	6 W (rated load)
Fuse protection:	
Internal fuse	2 AT
External fuse	Wire breaking 10 A, 16 A,
	Characteristic B, C
	An external DC fuse is required for the DC
	input voltage
* Note: The 787-1007 Power Supply r	nust be operated in a DALI network with
,	ster Module. Otherwise the connected DALI
devices will be destroyed.	



Description	Item No.	Pack. Unit
Primary Switch Mode Power Supply,	787-1007	1
18 VDC / 1.1A		
T 1 D		
Technical Data		
Environmental requirements:		
Ambient operating temperature	-25 °C +55 °C	
Storage temperature	-25 °C +80 °C	
Rel. humidity	30 % 85 % (no condensation)	
Degree of pollution	2 (acc. to EN 50178)	
Climatic category	3K3 (acc. to EN 60721)	
Safety and protection:		
Enclosure	Plastic, light gray,	
	Flammability class VO acc. to UL	94
Test voltage pri sec.	4.2 kV DC	
Protection class	Prepared for class II equipment	
Degree of protection	IP20 (acc. to EN 60529)	
No-load proof	yes	
Feedback voltage	max. 20 VDC	
Short circuit protection	yes	
MTBF	500000 h	
Connection and type of mounting:		<u>^</u>
Wire connection Cross sections	Input/Output: WAGO Series 74	0
Cross sections	Input/Output:	0 10
Stripped lengths	0.08 mm ² 2.5 mm ² / AWG 2 Input/Output: 6 7 mm / 0.24	
Stripped lengths Type of mounting	DIN-rail mount (EN 60715)	0.20 In
Dimensions and weight:		
Dimensions and weight: Dimensions (mm) W x H x L	54 x 89 x 59	
	Length: 55 mm, from upper-edge	
	of DIN 35 rail	
Weight	170 g	
Standards and approvals:	9	
Standards/Specifications	EN 60950 (SELV), EN 61204-3	,
	GL (Environmental Category A, I	
	UL 60950**, UL 508** (** pe	
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