

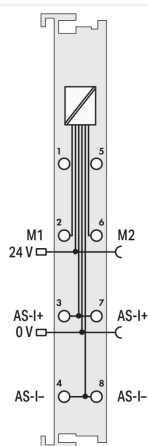
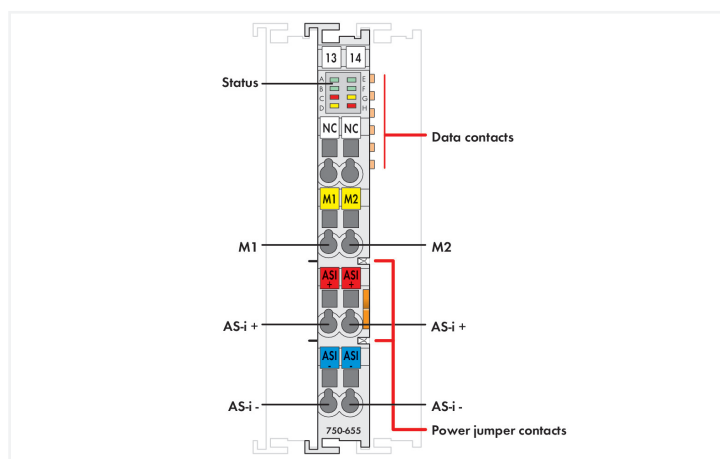
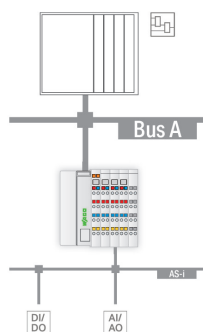
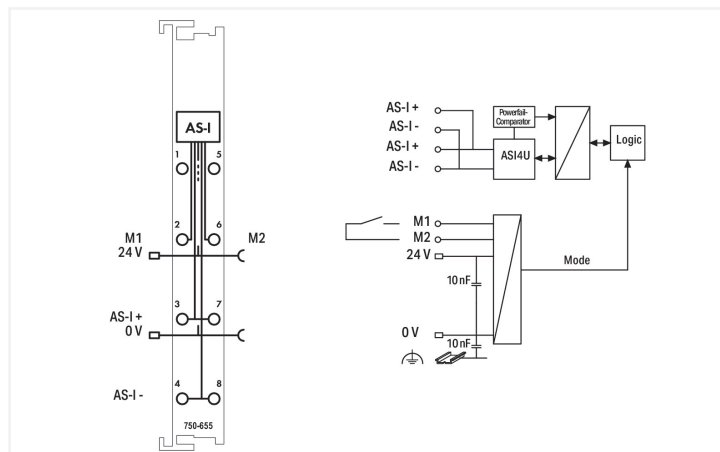
Data Sheet | Item Number: 750-655

AS Interface Master

<https://www.wago.com/750-655>



Color: ■ light gray



The 750-655 AS-I Master connects AS-Interface systems to a higher-level fieldbus. This module acts as a master for the AS-Interface and as a slave for the fieldbus. The 750-655 AS-I Master is a M4 master in accordance with the AS-Interface V3.0 Specification. This means:

- Up to 62 AS-Interface slaves can be connected per AS-I line
- Analog signal transfer is integrated in the master.
- All slave profiles are supported in compliance with V3.0.

Combined 1–5 transaction types and acyclic write/read services are implemented.

The AS-I functions are provided both cyclically and acyclically via the fieldbus.

In cyclic data transfer, up to 32 bytes of I/O data are transferred for the AS-I line binary data. Free cyclic process image areas can be mapped with analog values. Furthermore, analog signals and all other commands and data of the new AS-I specification can be transferred in a management channel via the fieldbus.

Diagnostics, which go far beyond the AS-I specifications, simplify the detection of both sporadic configuration errors and AS-I communication interferences. An auto-installation mode allows an AS-Interface network to be created via sequential slave installation, with no addressing tool required.

Both signal transmission and operating status, as well as trouble-free local bus communication, are indicated via LEDs.

Technical data

Device specification	AS-i master class: M4; AS-I Specification: 3.0
Device-specific	AS-I cable length (max.): 100 m, with repeater 300 m
Topology	Number of slaves: up to 62; Slave profiles: V3.0 with transaction types 1 ... 5
Current consumption, typ.	40 mA (AS-I)
Cycle time (AS-I)	0.3 ... 10 ms, depending on the number of slaves
Transmission channel	1
Data width	12 ... 48 bytes (max.), configurable, including 1 byte control/status
Supply voltage	AS-I: 26.5 ... 31.6 V
Supply voltage (system)	5 VDC; via data contacts
Current consumption (system supply)	55 mA
Supply voltage (field)	24 VDC (-15 ... +20 %); via power jumper contacts (power supply via blade contact; transmission (field side supply voltage only) via spring contact)
Isolation	500 V system/supply/AS-I
Indicators	LED (A, B, E, F) green: AS-Interface-Power, Mapping Consistency, AS-Interface active, PRG enable; LED (C, H) red: local bus timeout, general error; LED (D, G) yellow: Overflow, CFG Mode
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2

Connection Data

Connection technology: I/O	6 x CAGE CLAMP®
Connectable conductor materials	Copper
Connection type	Inputs/outputs
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches

Physical data

Width	12 mm / 0.472 inches
Height	100 mm / 3.937 inches
Depth	67.8 mm / 2.669 inches
Depth from upper-edge of DIN-rail	60.6 mm / 2.386 inches

Mechanical data

Mounting type	DIN-35 rail
Pluggable connector	fixed



Material data	
Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Fire load	0.877 MJ
Weight	54.7 g
Conformity marking	CE

Environmental requirements	
Ambient temperature (operation)	0 ... +55 °C
Ambient temperature (storage)	-40 ... +85 °C
Protection type	IP20
Pollution degree	2 per IEC 61131-2
Operating altitude	0 ... 2000 m / 0 ... 6562 ft
Mounting position	Horizontal left, horizontal right, horizontal top, horizontal bottom, vertical top and vertical bottom
Relative humidity (without condensation)	95 %
Vibration resistance	4g per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	per EN 61000-6-2, marine applications
EMC emission of interference	per EN 61000-6-4, 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 (I/O System)
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454503024
Customs tariff number	85389099990

Product Classification	
UNSPSC	32151705
eCl@ss 10.0	27-24-26-08
eCl@ss 9.0	27-24-26-08
ETIM 9.0	EC001604
ETIM 10.0	EC001604
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption



Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03083
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-MSM750
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	25-0415412
BSH Bundesamt fuer Seeschifffahrt und Hydrographie	-	1104
BV Bureau Veritas S.A.	-	30389/C0 BV
DNV DNV GL SE	DNV-CG-0339,Aug.2021	TAA0000194
KR Korean Register of Shipping	-	KR HMB05880-AC001
LR Lloyds Register EMEA	-	LR22180952TA
PRS Polski Rejestr Statków	-	TE/1101/880590/23
RINA RINA Germany GmbH	-	ELE343521XG001

Approvals for hazardous areas



Approval	Standard	Certificate Name
ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV14ATEX148929X (II 3 G Ex ec IIC T4 Gc)
CCCEX CQST/CNEC	CNCA-C23-01	2020312310000213 (Ex ec IIC T4 Gc)
IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX TUN 14.0035 X (Ex ec IIC T4 Gc)
INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079-0	TÜV 12.1297 X
UKEX WAGO GmbH & Co. KG	EN 60079-0	UKCA_WA GO22UKEX003X_ec
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726

Protocol and fieldbus specific certificates



Approval	Standard	Certificate Name
AS-Interface AS-International Association	-	ZU-Nr. 50601



Downloads			
Environmental Product Compliance			
Compliance Search			
Environmental Product Compliance 750-655			↓

Documentation			
Manual		System Description	
Product Manual AS-Interface Master	V 1.4.0	pdf	9333.41 KB
		↓	
System Manual Series 750/753			↓
		750/753 Series I/O-System – General Product Information	pdf
			953.35 KB
		↓	
		Overview on WAGO-I/O-SYSTEM 750 approvals	pdf
			770.48 KB
		↓	

Bid Text			
750-655	19.02.2019	xml	4.71 KB
		↓	
750-655	16.10.2017	doc	26.50 KB
		↓	

Instruction Leaflet			
CCC Ex (Additional information)	26.04.2023	pdf	159.76 KB
		↓	

Application Notes			
Application Note CoDeSys 2.3			
AS Interface Modul 750-655 using ASInterface_01.lib (a113400)	1.0.0 24.05.2005	zip	182.48 KB
		↓	

CAD/CAE-Data			
CAD data		CAE data	
2D/3D Models 750-655		EPLAN Data Portal 750-655	↓
		↓	
		WSCAD Universe 750-655	↓
		↓	
		ZUKEN Portal 750-655	↓
		↓	



Device Files

Device Driver			
WAGO USB Service Kabel Treiber / Serie 750 und 857	6.5.3.0 10.09.2014	zip 4721.96 KB	

Libraries

e!COCKPIT libraries			
e!COCKPIT Library Description WagoAppAsi	1.7.1.0 29.09.2023	pdf 682.36 KB	

Library			
Function blocks for the AS Interface 750-655	1.0.0	zip 164.98 KB	

1 Compatible Products

1.1 Optional Accessories

1.1.1 DIN-rail

1.1.1.1 Mounting accessories

 Item No.: 210-196 Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslopped; similar to EN 60715; silver-colored	 Item No.: 210-198 Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; copper-colored	 Item No.: 210-197 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slopped; similar to EN 60715; silver-colored	 Item No.: 210-114 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslopped; similar to EN 60715; silver-colored
 Item No.: 210-118 Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; silver-colored	 Item No.: 210-115 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; according to EN 60715; "Hole width 18 mm; silver-colored	 Item No.: 210-112 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; according to EN 60715; "Hole width 25 mm; silver-colored	 Item No.: 210-113 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslopped; according to EN 60715; silver-colored

1.1.2 Marking

1.1.2.1 Group marker carrier

 Item No.: 750-107 Group marker carrier
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1.1.2.2 Marker

 Item No.: 2009-145/000-006 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue	 Item No.: 2009-145/000-007 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray	 Item No.: 2009-145/000-023 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green	 Item No.: 2009-145/000-012 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange
 Item No.: 2009-145/000-005 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red	 Item No.: 2009-145/000-024 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet	 Item No.: 2009-145 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	 Item No.: 2009-145/000-002 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow
 Item No.: 248-501/000-006 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue	 Item No.: 248-501/000-007 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray	 Item No.: 248-501/000-023 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green	 Item No.: 248-501/000-017 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green

1.1.2.2 Marker


Item No.: 248-501/000-012

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


Item No.: 248-501/000-005

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


Item No.: 248-501/000-024

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


Item No.: 248-501

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


Item No.: 248-501/000-002

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

1.1.2.3 Marker carrier


Item No.: 750-103

Group marker carrier

1.1.3 Shield termination

1.1.3.1 Shield clamping saddles


Item No.: 790-108

Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm


Item No.: 790-208

Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm


Item No.: 790-116

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


Item No.: 790-216

Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm


Item No.: 790-124

Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm


Item No.: 790-220

Shield clamping saddle; 30 mm wide; 6 ... 20 mm


Item No.: 790-140

Shield clamping saddle; diameter of compatible conductor

1.1.4 Supply module

1.1.4.1 Supply module


Item No.: 750-612

Power Supply; 0 ... 230 V AC/DC


Item No.: 750-602

Power Supply; 24 VDC


Item No.: 750-601

Power Supply; 24 VDC; fuse holder


Item No.: 750-610

Power Supply; 24 VDC; fuse holder; Diagnostics

1.1.5 System enclosure

1.1.5.1 System enclosure


Item No.: 850-825

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


Item No.: 850-826

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


Item No.: 850-827

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


Item No.: 850-828

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


Item No.: 850-826/002-000

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


Item No.: 850-827/002-000

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


Item No.: 850-828/002-000

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


Item No.: 850-834

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



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

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

IP65 enclosure; Sheet steel (RAL 7035); Wx-HxD (200x120x200 mm); without flange plate

IP65 enclosure; Sheet steel (RAL 7035); Wx-HxD (300x120x200 mm); without flange plate



IP65 enclosure; Sheet steel (RAL 7035); Wx-HxD (400x120x200 mm); without flange plate

IP65 enclosure; Sheet steel (RAL 7035); Wx-HxD (600x120x200 mm); without flange plate