

## Data sheet

## 6ES7153-1AA03-0XB0



SIMATIC DP, Connection IM 153-1, for ET 200M, for max. 8 S7-300 modules

Figure similar

General information	
Product type designation	IM 153-1 DP ST
Vendor identification (VendorID)	801Dh
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
external protection for power supply lines (recommendation)	not necessary
Mains buffering	
• Mains/voltage failure stored energy time	5 ms
Input current	
Current consumption, max.	350 mA; At 24 V DC
Inrush current, typ.	2.5 A
I <sup>2</sup> t	0.1 A <sup>2</sup> s
output voltage / header	
Rated value (DC)	5 V
Output current	
for backplane bus (5 V DC), max.	1 A
Power loss	
Power loss, typ.	3 W
Address area	
Addressing volume	
• Inputs	128 byte
• Outputs	128 byte
Hardware configuration	
Number of modules per DP slave interface, max.	8
Interfaces	
Transmission procedure	RS 485
Transmission rate, max.	12 Mbit/s
1. Interface	
automatic detection of transmission rate	Yes
Interface types	
• Output current of the interface, max.	90 mA
• Design of the connection	9-pin sub D socket
PROFIBUS DP slave	
• GSD file	(for DPV1) SIEM801D.GSD; SI01801D.GSG
• automatic baud rate search	Yes
Protocols	
Bus protocol/transmission protocol	PROFIBUS DP to EN 50170

<b>Protocols (Ethernet)</b>	
• TCP/IP	No
<b>PROFIBUS DP</b>	
• Number of node addresses, max.	1 to 125 permitted
<b>Services</b>	
— SYNC capability	Yes
— FREEZE capability	Yes
— Direct data exchange (slave-to-slave communication)	Yes; Sender
<b>Potential separation</b>	
Potential separation exists	Yes
<b>Isolation</b>	
Isolation tested with	Isolation voltage 500 V
<b>Degree and class of protection</b>	
IP degree of protection	IP20
<b>Ambient conditions</b>	
Ambient temperature during operation	
• min.	0 °C
• max.	60 °C
• horizontal installation, min.	0 °C
• horizontal installation, max.	60 °C
• vertical installation, min.	0 °C
• vertical installation, max.	40 °C
Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	3 000 m
<b>configuration / header</b>	
Configuration software	
• STEP 7	STEP 7 / COM PROFIBUS / non-Siemens tools via GSD file
<b>Dimensions</b>	
Width	40 mm
Height	125 mm
Depth	117 mm
<b>Weights</b>	
Weight, approx.	360 g

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3/12/2024 

SIMATIC DP, interface DP/PA-Link and ET200M IM153-2 HF for extended temperature range for max. 12 S7-300 modules with redundancy capability, Timestamping suitable for isochronous mode New features: up to 12 modules can be used Slave Initiative for Drive ES and Switch ES Expanded quantity structure for HART auxiliary variables Operation of the 64-channel modules 32 signals / slot +++ Observe compatibility instructions in manual +++

List Price	Show prices
<b>Customer Price</b>	Show prices
Additional Services	For further information & to order this service, please contact your local Spares&Repair Partner

Image similar

Service & Support (Manuals, Certificates, FAQs...)	Download
Training courses for this product	SITRAIN – Digital Industry Academy

## Product

Article Number (Market Facing Number)	6ES7153-2BA70-0XB0
Product Description	SIMATIC DP, interface DP/PA-Link and ET200M IM153-2 HF for extended temperature range for max. 12 S7-300 modules with redundancy capability, Timestamping suitable for isochronous mode New features: up to 12 modules can be used Slave Initiative for Drive ES and Switch ES Expanded quantity structure for HART auxiliary variables Operation of the 64-channel modules 32 signals / slot +++ Observe compatibility instructions in manual +++
Product family	IM 153-1/153-2
Product Lifecycle (PLM)	PM300:Active Product

## Price data

Region Specific PriceGroup / Headquarter Price Group	280 / 280
List Price	Show prices
Customer Price	Show prices
Metal Factor	None

## Delivery information

Export Control Regulations	AL : N / ECCN : 9N9999
Estimated dispatch time (Working Days)	15 Day/Days
Net Weight (kg)	0,288 Kg
Packaging Dimension	12,90 x 15,20 x 5,10
Package size unit of measure	CM
Quantity Unit	1 Piece
Packaging Quantity	1

## Additional Product Information

EAN	4047623404217
UPC	804766132315
Commodity Code	85389091
LKZ_FDB/ CatalogID	STPCST
Product Group	2488
Group Code	R336
Country of origin	Germany
Compliance with the substance restrictions according to RoHS directive	Since: 2014.05.12
Product class	A: Standard product which is a stock item could be returned within the returns guidelines/period.
WEEE (2012/19/EU) Take-Back Obligation	-

REACH Art. 33 Duty to inform according to the current list of candidates

SCIP number fae11d13-f196-4281-85e7-6198f41d7ce5

## Classifications

	Version	Classification
eClass	12	27-24-26-08
eClass	14	27-24-26-08
eClass	6	27-24-26-08
eClass	7.1	27-24-26-08
eClass	8	27-24-26-08
eClass	9	27-24-26-08
eClass	9.1	27-24-26-08
ETIM	7	EC001604
ETIM	8	EC001604
ETIM	9	EC001604
IDEA	4	3564
UNSPSC	15	32-15-17-05

## Data sheet

6ES7153-2AR04-0XA0

SIMATIC DP, ET 200M Red. Bundle Consisting of: 2x IM 153-2HF (6ES7153-2BA10-0XB0), 1x bus module in/in (6ES7195-7HD10-0XA0)

General information	
Product type designation	IM 153-2 HF
Supply voltage	
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Protocols	
Protocols (Ethernet)	
• TCP/IP	No
Potential separation	
Potential separation exists	Yes
Degree and class of protection	
IP degree of protection	IP20
Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm

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## Data sheet

**6ES7153-2BA10-0XB0**

SIMATIC DP, Connection ET 200M IM 153-2 High Feature for max. 12 S7-300 modules with redundancy capability, Timestamping suitable for isochronous mode  
New features: up to 12 modules can be used Slave INITIATIVE for Drive ES and Switch ES Expanded quantity structure for HART auxiliary variables Operation of the 64-channel modules 32 signals/slot +++Observe compatibility notes in manual+++

General information	
Product type designation	IM 153-2 DP HF
Firmware version	V6.0.0
Vendor identification (VendorID)	801Eh
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
external protection for power supply lines (recommendation)	2,5 A
Mains buffering	
• Mains/voltage failure stored energy time	5 ms
Input current	
Current consumption, max.	650 mA; with 24 V DC supply
Inrush current, typ.	3 A
I <sup>2</sup> t	0.1 A <sup>2</sup> ·s
Output current	
for backplane bus (5 V DC), max.	1.5 A
Power loss	
Power loss, typ.	5.5 W
Address area	
Addressing volume	
• Inputs	244 byte
• Outputs	244 byte
Hardware configuration	
Number of modules per DP slave interface, max.	12
Time stamping	
Accuracy	1 ms; 1 ms at up to 8 modules; 10 ms at up to 12 modules
Number of message buffers	15
Messages per message buffer	20
Number of stampable digital inputs, max.	128; Max. 128 signals/station; max. 32 signals/slot
Time format	RFC 1119
Time resolution	0.466 ns
Time interval for transmitting the message buffer if a message is present	1 000 ms
Time stamp on signal change	rising / falling edge as signal entering or exiting
Interfaces	
Transmission procedure	RS 485
Transmission rate, max.	12 Mbit/s
1. Interface	
automatic detection of transmission rate	Yes
Interface types	
• Output current of the interface, max.	70 mA
• Design of the connection	9-pin sub D socket
PROFIBUS DP slave	
• GSD file	SI05801E.GSG
• automatic baud rate search	Yes
Protocols	
Bus protocol/transmission protocol	PROFIBUS DP to EN 50170

<b>Protocols (Ethernet)</b>	
• TCP/IP	No
<b>PROFIBUS DP</b>	
• Number of node addresses, max.	1 to 125 permitted
<b>Services</b>	
— SYNC capability	Yes
— FREEZE capability	Yes
— Direct data exchange (slave-to-slave communication)	Yes; as publisher with all IO, as subscriber with F-IO only
<b>Potential separation</b>	
Potential separation exists	Yes
<b>Isolation</b>	
Isolation tested with	Isolation voltage 500 V
<b>Degree and class of protection</b>	
IP degree of protection	IP20
<b>Ambient conditions</b>	
Ambient temperature during operation	
• min.	0 °C
• max.	60 °C
• horizontal installation, min.	0 °C
• horizontal installation, max.	60 °C
• vertical installation, min.	0 °C
• vertical installation, max.	40 °C
Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	3 000 m
<b>configuration / header</b>	
Configuration software	
• STEP 7	Yes; STEP 7 / COM PROFIBUS / non-Siemens tools via GSD file
<b>Dimensions</b>	
Width	40 mm
Height	125 mm
Depth	117 mm
<b>Weights</b>	
Weight, approx.	360 g

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