

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 +++

| General information | |
|--|--|
| Product type designation | IM 153-2 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 | |
| <ul style="list-style-type: none"> Mains/voltage failure stored energy time | 5 ms |
| Input current | |
| Current consumption, max. | 650 mA |
| Inrush current, typ. | 3 A |
| I^2t | 0.1 A ² ·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 | |
| <ul style="list-style-type: none"> Inputs Outputs | 244 byte |
| | 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 |
| PROFIBUS DP | |
| • Number of node addresses, max. | 1 to 125 permitted |
| Services | |
| — 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 |

Potential separation

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|-----------------------------|-----|
| Potential separation exists | Yes |
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Isolation

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| Isolation tested with | Isolation voltage 500 V |
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Degree and class of protection

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| IP degree of protection | IP20 |
|-------------------------|------|

Ambient conditions

| | |
|---|--------|
| Ambient temperature during operation | |
| • horizontal installation, min. | -25 °C |
| • horizontal installation, max. | 60 °C |
| • vertical installation, min. | -25 °C |
| • vertical installation, max. | 40 °C |
| Altitude during operation relating to sea level | |

• Installation altitude above sea level, max. 3 000 m

Configuration

Configuration software

• STEP 7 Yes; STEP 7 / COM PROFIBUS / non-Siemens tools via GSD file

Dimensions

Width 40 mm

Height 125 mm

Depth 117 mm

Weights

Weight, approx. 360 g

last modified: 10/09/2020