

SIMATIC DP, ET 200M INTERFACE IM 153-2 HIGH FEATURE FOR  
MAX. 8 S7-300 MODULES, WITH REDUNDANCY, TIME  
STAMPING FIT FOR ISOCHRONOUS MODE

### General information

|                                  |       |
|----------------------------------|-------|
| Vendor identification (VendorID) | 801Eh |
|----------------------------------|-------|

### Supply voltage

|   |               |
|---|---------------|
| Rated value (DC)  | Yes           |
| <ul style="list-style-type: none"> <li>• 24 V DC</li> </ul> |               |
| external protection for power supply lines (recommendation) | not necessary |

### Input current

|                           |                       |
|---------------------------|-----------------------|
| Current consumption, max. | 550 mA; at 24 V DC    |
| Inrush current, typ.      | 2.5 A                 |
| $I^2t$                    | 0.1 A <sup>2</sup> ·s |

### Output voltage

|                  |     |
|------------------|-----|
| Rated value (DC) | 5 V |
|------------------|-----|

### Output current

|                                  |     |
|----------------------------------|-----|
| for backplane bus (5 V DC), max. | 1 A |
|----------------------------------|-----|

### Power loss

|                  |     |
|------------------|-----|
| Power loss, typ. | 5 W |
|------------------|-----|

### Address area

|   |          |
|---|----------|
| Addressing volume   |          |
| <ul style="list-style-type: none"> <li>• Inputs</li> <li>• Outputs</li> </ul> | 128 byte |
|   | 128 byte |

### Time stamping

|   |   |
|---|---|
| Accuracy  | 10 ms; 10 ms / 3 ms                                 |
| Number of message buffers   | 15  |
| Messages per message buffer   | 20  |
| Number of stampable digital inputs, max.                                  | 128   |
| Time format   | RFC 1119 Internet (ISP)                             |
| Time resolution   | 1 ms  |
| 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

|   |   |
|---|---|
| Interface physics, RS 485   | Yes   |
| <b>PROFIBUS DP</b>  |   |
| <ul style="list-style-type: none"> <li>• Node addresses</li> </ul>  | 1 to 125 permitted  |
| <ul style="list-style-type: none"> <li>• automatic detection of transmission rate</li> </ul>              | Yes   |
| <ul style="list-style-type: none"> <li>• Transmission rate, max.</li> </ul>                               | 12 Mbit/s   |
| <ul style="list-style-type: none"> <li>• SYNC capability</li> </ul>                                       | Yes   |
| <ul style="list-style-type: none"> <li>• FREEZE capability</li> </ul>                                     | Yes   |
| <ul style="list-style-type: none"> <li>• Direct data exchange (slave-to-slave communication)</li> </ul>   | Yes; Sender   |
| <ul style="list-style-type: none"> <li>• Design of electrical connection of PROFIBUS interface</li> </ul> | RS 485  |
| <b>1. Interface</b>   |   |
| <b>DP slave</b>   |   |
| <ul style="list-style-type: none"> <li>• GSD file</li> </ul>  | (for DPV1) SIEM801E.GSD; SI01801E.GSG (for IM 153-2AA0x); SI02801E.GSG (for IM 153-2BA0x) |
| <ul style="list-style-type: none"> <li>• automatic baud rate search</li> </ul>                            | Yes   |
| <b>Protocols</b>  |   |
| Bus protocol/transmission protocol  | PROFIBUS DP to EN 50170   |
| <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>   |   |
| <b>Ambient temperature during operation</b>   |   |
| <ul style="list-style-type: none"> <li>• min.</li> </ul>  | 0 °C  |
| <ul style="list-style-type: none"> <li>• max.</li> </ul>  | 60 °C   |
| <b>Altitude during operation relating to sea level</b>  |   |
| <ul style="list-style-type: none"> <li>• Installation altitude above sea level, max.</li> </ul>           | 3 000 m   |
| <b>Configuration</b>  |   |
| <b>Configuration software</b>   |   |
| <ul style="list-style-type: none"> <li>• STEP 7</li> </ul>  | 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   |
| <b>last modified:</b>   | 03/08/2018  |