




SIMATIC ET 200AL, PROFIBUS interface module IM 157-1 DP, Degree of protection IP67

| General information | |
|--|--------------------------|
| Product type designation | IM 157-1 DP |
| HW functional status | FS02 |
| Firmware version | V1.0.x |
| Vendor identification (VendorID) | 81A9H |
| Product function | |
| • I&M data | Yes; I&M0 to I&M3 |
| Engineering with | |
| • STEP 7 TIA Portal configurable/integrated from version | STEP 7 V13 SP1 or higher |
| • STEP 7 configurable/integrated from version | From V5.5 SP4 Hotfix 3 |
| • PROFIBUS from GSD version/GSD revision | GSD as of Revision 5 |
| Configuration control | |
| via dataset | Yes |
| Supply voltage | |
| power supply according to NEC Class 2 required | No |
| Load voltage 1L+ | |
| • Rated value (DC) | 24 V |
| • permissible range, lower limit (DC) | 20.4 V |
| • permissible range, upper limit (DC) | 28.8 V |
| • Reverse polarity protection | Yes; against destruction |
| Input current | |
| Current consumption (rated value) | 50 mA |
| from load voltage 1L+ (unswitched voltage) | 4 A; Maximum value |
| from load voltage 2L+, max. | 4 A; Maximum value |
| Power loss | |
| Power loss, typ. | 1.7 W |
| Address area | |
| Address space per station | |
| • Address space per station, max. | 244 byte |
| Interfaces | |
| Number of PROFIBUS interfaces | 1 |
| 1. Interface | |
| Interface type | PROFIBUS DP |
| Interface types | |
| • RS 485 | Yes |
| • M12 port | Yes; 2x M12 B-coded |
| Protocols | |
| • PROFIBUS DP slave | Yes |
| Interface types | |
| RS 485 | |

| | |
|---|---|
| • Transmission rate, max. | 12 Mbit/s |
| Protocols | |
| PROFIBUS DP | |
| Services | |
| — SYNC capability | Yes |
| — FREEZE capability | Yes |
| — Direct data exchange (slave-to-slave communication) | Yes |
| — DPV0 | Yes |
| — DPV1 | Yes |
| Interrupts/diagnostics/status information | |
| Diagnostics function | Yes |
| Alarms | |
| • Diagnostic alarm | Yes |
| Diagnostics indication LED | |
| • RUN LED | Yes; green LED |
| • ERROR LED | Yes; red LED |
| • MAINT LED | Yes; Yellow LED |
| • Connection display DP | Yes; green LED |
| Potential separation | |
| between the load voltages | Yes |
| between PROFIBUS DP and all other circuit components | Yes |
| Isolation | |
| Isolation tested with | 707 V DC (type test) |
| Degree and class of protection | |
| IP degree of protection | IP65/67 |
| Standards, approvals, certificates | |
| Suitable for safety-related tripping of standard modules | Yes; From FS01 |
| Highest safety class achievable for safety-related tripping of standard modules | |
| • Performance level according to ISO 13849-1 | PL d |
| • Category according to ISO 13849-1 | Cat. 3 |
| • SIL acc. to IEC 62061 | SIL 2 |
| • remark on safety-oriented shutdown | https://support.industry.siemens.com/cs/de/en/view/39198632 |
| Ambient conditions | |
| Ambient temperature during operation | |
| • min. | -30 °C |
| • max. | 55 °C |
| connection method | |
| Design of electrical connection for supply voltage | M8, 4-pole |
| ET-Connection | |
| • ET-Connection | M8, 4-pin, shielded |
| Dimensions | |
| Width | 45 mm |
| Height | 159 mm |
| Depth | 46 mm |
| Weights | |
| Weight, approx. | 211 g |
| last modified: | 8/16/2023  |

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