

# SIEMENS

## Product data sheet

**6ES7322-5RD00-0AB0**


SIMATIC S7, DIGITAL OUTPUT L SM 322,  
OPTICALLY ISOLATED, 4 DO, 15V / 20mA,  
1 X 20 PIN,  
FOR SIGNALS FROM HAZARDOUS AREAS  
CAPABLE OF DIAGNOST., PTB-TESTED

|                                           |                                                                   |
|-------------------------------------------|-------------------------------------------------------------------|
| Supply voltage                            |                                                                   |
| Load voltage L+                           |                                                                   |
| Rated value (DC)                          | 24 V                                                              |
| Input current                             |                                                                   |
| from load voltage L+ (without load), max. | 160 mA                                                            |
| from backplane bus 5 V DC, max.           | 70 mA                                                             |
| Power losses                              |                                                                   |
| Power loss, typ.                          | 3 W                                                               |
| Digital outputs                           |                                                                   |
| Number/binary outputs                     | 4                                                                 |
| Functionality/short-circuit strength      | Yes ; Electronic                                                  |
| Response threshold, typ.                  | Output current with short-circuit protection, min. 20.5 mA + 10 % |
| Load resistance range                     |                                                                   |
| upper limit                               | 200 $\Omega$ ; Two-wire connection                                |
| Output voltage                            |                                                                   |

|                                                       |                  |
|-------------------------------------------------------|------------------|
| Rated value (DC)                                      | 15 V             |
| Output current                                        |                  |
| for signal "1" permissible range for 0 to 60 °C, max. | 20 mA ; +/- 10 % |
| Switching frequency                                   |                  |
| with resistive load, max.                             | 100 Hz           |
| Cable length                                          |                  |
| Cable length unshielded, max.                         | 200 m            |
| Interrupts/diagnostics/status information             |                  |
| Diagnostic messages                                   |                  |
| Diagnostic functions                                  | Yes              |
| Diagnostic information readable                       | Yes              |
| Short circuit                                         | Yes              |
| Group error                                           | Yes              |
| Diagnostics indication LED                            |                  |
| Short circuit per channel (red)                       | Yes              |
| Short-circuit group error (red)                       | Yes              |
| Status indicator digital output (green)               | Yes              |
| Ex(i) characteristics                                 |                  |
| Module for Ex(i) protection                           | Yes              |
| Max. values of output circuits (per channel)          |                  |
| Co (permissible external capacity), max.              | 500 nF           |
| Io (short-circuit current), max.                      | 85 mA            |
| Lo (permissible external inductivity), max.           | 5 mH             |
| Po (power of load), max.                              | 335 mW           |
| Uo (output no-load voltage), max.                     | 15.75 V          |
| Galvanic isolation                                    |                  |
| Galvanic isolation digital outputs                    |                  |
| Galvanic isolation digital outputs                    | Yes              |
| between the channels, in groups of                    | 1                |
| Standards, approvals, certificates                    |                  |
| Use in hazardous areas                                |                  |
| Type of protection acc. to EN 50020 (CENELEC)         | [EEx ib] IIC     |

|                               |                                                               |
|-------------------------------|---------------------------------------------------------------|
| Type of protection acc. to FM | AIS CL.1, DIV 1, GP A, B, C, D; CL.I, DIV 2, GP A, B, C, D T4 |
| Test number PTB               | Ex-96.D.2102X                                                 |
| Ambient conditions            |                                                               |
| Operating temperature         |                                                               |
| max.                          | 60 °C                                                         |
| Connection method             |                                                               |
| required front connector      | 20-pin                                                        |
| Weight                        |                                                               |
| Weight, approx.               | 230 g                                                         |
| Status                        | Jul 17, 2012                                                  |