

# SIEMENS

## Product data sheet

**6ES7322-1BH01-0AA0**


SIMATIC S7-300, DIGITAL OUTPUT SM 322,  
OPTICALLY ISOLATED, 16 DO, 24V DC,  
0.5A,  
1 X 20 PIN SUM OF OUTPUT CURRENTS  
4A/GROUP (8A/MODULE)

### Supply voltage

#### Load voltage L+

|                                     |        |
|-------------------------------------|--------|
| Rated value (DC)                    | 24 V   |
| permissible range, lower limit (DC) | 20.4 V |
| permissible range, upper limit (DC) | 28.8 V |

### Input current

|                                           |       |
|-------------------------------------------|-------|
| from load voltage L+ (without load), max. | 80 mA |
| from backplane bus 5 V DC, max.           | 80 mA |

### Power losses

|                  |       |
|------------------|-------|
| Power loss, typ. | 4.9 W |
|------------------|-------|

### Digital outputs

|                                             |            |
|---------------------------------------------|------------|
| Number/binary outputs                       | 16         |
| Limitation of inductive shutdown voltage to | L+ (-53 V) |
| Lamp load, max.                             | 5 W        |

### Load resistance range

|                                                       |              |
|-------------------------------------------------------|--------------|
| lower limit                                           | 48 $\Omega$  |
| upper limit                                           | 4 k $\Omega$ |
| <b>Output voltage</b>                                 |              |
| for signal "1", min.                                  | L+ (-0.8 V)  |
| <b>Output current</b>                                 |              |
| for signal "1" rated value                            | 0.5 A        |
| for signal "1" permissible range for 0 to 40 °C, max. | 0.6 A        |
| for signal "1" minimum load current                   | 5 mA         |
| for signal "0" residual current, max.                 | 0.5 mA       |
| <b>Switching frequency</b>                            |              |
| with resistive load, max.                             | 100 Hz       |
| with inductive load, max.                             | 0.5 Hz       |
| on lamp load, max.                                    | 10 Hz        |
| <b>Aggregate current of outputs (per group)</b>       |              |
| <b>horizontal installation</b>                        |              |
| up to 40 °C, max.                                     | 4 A          |
| up to 60 °C, max.                                     | 3 A          |
| <b>vertical installation</b>                          |              |
| up to 40 °C, max.                                     | 2 A          |
| <b>Cable length</b>                                   |              |
| Cable length, shielded, max.                          | 1000 m       |
| Cable length unshielded, max.                         | 600 m        |
| <b>Interrupts/diagnostics/status information</b>      |              |
| <b>Alarms</b>                                         |              |
| Diagnostic alarm                                      | No           |
| <b>Diagnostic messages</b>                            |              |
| Diagnostics                                           | No           |
| Wire break                                            | No           |
| Short circuit                                         | No           |
| Fuse blown                                            | No           |
| Missing load voltage                                  | No           |
| <b>Diagnostics indication LED</b>                     |              |
| Rated load voltage PWR (green)                        | No           |

|                                            |                   |
|--------------------------------------------|-------------------|
| Fuse OK FSG (green)                        | No                |
| Galvanic isolation                         |                   |
| Galvanic isolation digital outputs         |                   |
| between the channels, in groups of         | 8                 |
| between the channels and the backplane bus | Yes ; Optocoupler |
| Isolation                                  |                   |
| Isolation checked with                     | 500 V DC          |
| Connection method                          |                   |
| required front connector                   | 20-pin            |
| Dimensions                                 |                   |
| Width                                      | 40 mm             |
| Height                                     | 125 mm            |
| Depth                                      | 120 mm            |
| Weight                                     |                   |
| Weight, approx.                            | 190 g             |
| Status                                     | Jul 17, 2012      |