## Data Sheet

## Fast Ethernet Industrial Switches Entry Line



## Description

The Entry Line series comprises a number of compact Fast Ethernet switches. The basic devices have 5 x or 8 x RJ-45 copper ports.

Extended switch versions are equipped with additional fiber optic ports. For example, in addition to the $4 x$ 10/100Base-TX ports in the 5 port version, a fiber optic port is available in the multimode or single mode version. The 6 port Fast Ethernet switch also has two fiber optic ports and can therefore be used for cascading.

The devices can be operated immediately and require no configuration. Ports are set automatically by AutoNegotiation (10/100/1000Base-T) and Auto MDI/MDI-X.

The power supply ports are designed redundantly. An isolated alarm contact reports a possible fault in the power supply of the device.

## Properties

- Easy configuration, no extensive configuration
- $5 x$ or $8 x 10 / 100 T X$ ports
- Version with fiber port for multimode and single mode
- 12 to 48 VDC power, redundant input
- Potential free contact indicates power loss
- Effective overvoltage protection


## Specifications

| Type | Fast Ethernet Switch Layer 2, IEEE 802.3 compliant |
| :---: | :---: |
| Performance | store-and-forward switching |
| MAC-Adresses | 2K MAC Address Table |
| Uplink (Fixed Optical Transceiver) |  |
| Number of Ports | 1 (MS655102X and MS655104X) <br> 2 (MS655122X and MS655124X) |
| Type | Fast Ethernet <br> Multimode: 100Base-FX <br> Single Mode: 100Base-FX |
| Connector | SC duplex |
| Fiber Cable Type | Multimode: <br> 50 or $62.5 / 125 \mu \mathrm{~m}$ fiber <br> Single Mode: <br> $9 / 125 \mu \mathrm{~m}$ fiber |
| Distance | Multimode $62,5 / 125$ um or 50/125 $\mu \mathrm{m}$, distance: 2 km Single Mode $9 / 125 \mu \mathrm{~m}$, duplex, distance: 30 km <br> Single Mode $9 / 125 \mu \mathrm{~m}$, duplex, distance: 40 km |
| Power Supply (DC) |  |
| Input Voltage | $2 \times 12 . .48 \mathrm{VDC}$ (redundant ports) |
| Power Consumption | 4.4 W |
| Connector | screw terminals |
| Mechanical |  |
| Dimensions | $\begin{aligned} & 30 \mathrm{~mm} \times 95 \mathrm{~mm} \times 140 \mathrm{~mm}(\mathrm{w} \\ & \times \mathrm{d} \times \mathrm{h}) \end{aligned}$ |
| Weight | 485 g |
| Mounting | DIN35 rail, Wall |
| Reliability |  |
| MTBF | 400.000h |

Local Ports (Twisted-Pair)

| Number of Ports | 4 |
| :--- | :--- |
|  | 8 (MS655140X only) |
| Type | Fast Ethernet, dual Speed, <br> $10 / 100 B a s e-T X$ |
| Connector | RJ-45 jack, shielded |
| Cable Type | Twisted-Pair cable, category <br> $5 e$, impedance 100 Ohm, <br> length max. 100 m |
| Flow Control | IEEE802.3x compliant |
| Pinout | Auto MDI/MDI-X, auto polarity |

Display

| Power | Power1 (green), <br> Power2 (green), <br> Fault (red) |
| :--- | :--- |
| Link | Local ports 1 to 4 <br>  <br> Link/Activity (Green), <br>  Full duplex/Collision (yellow) |

Environment

| Operating | $-10^{\circ} \mathrm{C} . .60^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Temperature | $-40^{\circ} \mathrm{C} . .+75^{\circ} \mathrm{C}$ (X-Version) |
| Storage Temperature | $-40^{\circ} \mathrm{C} . .85^{\circ} \mathrm{C}$ |
| Relative Humidity | 5\%..95\% non condensing |

Standards Compliance

| CE Mark | EN6 1000-4-2, EN6 1000-4-3 <br> EN-61000-4-4, EN6 1000-4-5 <br> EN6 1000-4-6, EN6 1000-4-8 <br> EN6 1000-4-11, EN6 1000-4-12 <br> EN6 1000-6-2, EN6 1000-6-4 |
| :---: | :---: |
| Safety | EN60950-1, IEC60068-2-32 <br> IEC60068-2-27, IEC60068-2-6 |
| IEEE (Ethernet) | IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX and 100Base-FX Fast Ethernet IEEE802.3x Flow Control and Back Pressure |

## Order Information

## Description

## Twisted Pair Switches

Fast Ethernet Industrial Switch, Entry Line, 5x 10/100Base-TX MS655100
Alternative Article Number: MS655100X
End of Life

Fast Ethernet Industrial Switch, Entry Line, 5x 10/100Base-TX, extended temperature
MS655100X
range $-40 . .+75^{\circ} \mathrm{C}$

Fast Ethernet Industrial Switch, Entry Line, 8x 10/100Base-TX
MS655140
Alternative Article Number: MS655140X
End of Life

Fast Ethernet Industrial Switch, Entry Line, 8x 10/100Base-TX, extended temperature
MS655140X
range $-40 . .+75^{\circ} \mathrm{C}$

## Switches with 1x Fiber-Uplink

Fast Ethernet Industrial Switch, Entry Line, 4x 10/100Base-TX, 1x 100Base-FX Multimode

## MS655102

1310 nm SC
End of Life
Alternative Article Number: MS655102X
Fast Ethernet Industrial Switch, Entry Line, 4x 10/100Base-TX, 1x 100Base-FX Multimode
MS655102X 1310 nm SC, extended temperature range $-40 . .+75^{\circ} \mathrm{C}$

Industrial Fast Ethernet Switch, Entry Line, 4x 10/100Base-TX, 1x 100Base-FX Single
MS655104 mode 1310 nm SC

End of Life
Alternative Article Number: MS655104X
Industrial Fast Ethernet Switch, Entry Line, $4 \times 10 / 100$ Base-TX, $1 \times$ 100Base-FX Single
MS655104X mode 1310 nm SC, extended temperature range $-40 . .+75^{\circ} \mathrm{C}$

## Switches with 2x Fiber-Uplink

Fast Ethernet Industrial Switch, Entry Line, 4x 10/100Base-TX, 2x 100Base-FX Multimode
MS655122 1310 nm SC

End of Life
Alternative Article Number: MS655122X
Fast Ethernet Industrial Switch, Entry Line, 4x 10/100Base-TX, 2x 100Base-FX Multimode
MS655122X
1310 nm SC, extended temperature range $-40 . .+75^{\circ} \mathrm{C}$
Fast Ethernet Industrial Switch, Entry Line, 4x 10/100Base-TX, 2x 100Base-FX Single
MS655124
Mode 1310nm SC
Alternative Article Number: MS655124X
Fast Ethernet Industrial Switch, Entry Line, 4x 10/100Base-TX, 2x 100Base-FX Single
MS655124X Mode 1310 nm SC, extended temperature range $-40 . .+75^{\circ} \mathrm{C}$

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