

## ELine 250® RJ45 – the real Category 6

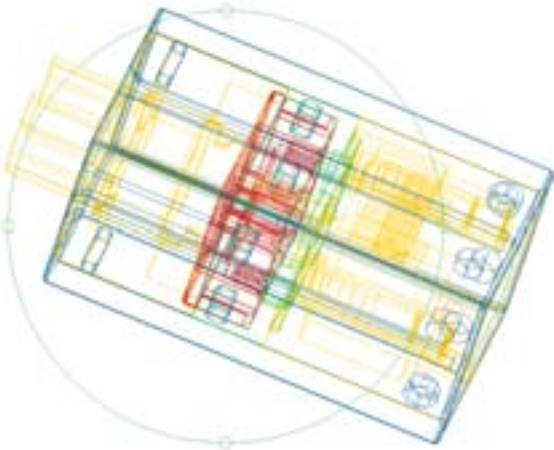
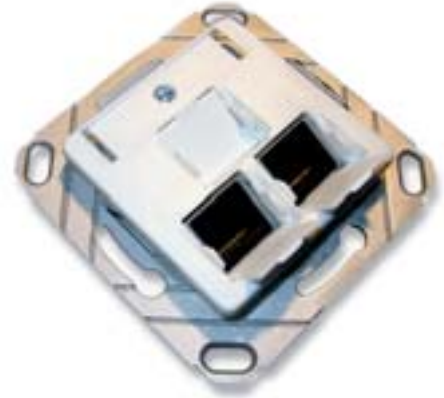
ELine 250® RJ45 S (shielded) and ELine 250® RJ45 U (unshielded)

ELine 250® RJ45 jacks of the PREMIUM system were developed for the highest of demands: Optimum performance, easy assembly and compact design for high packing density make this series unique.

In addition, the dimensions of the housing are compatible with the multimedia jack ELine 1200® EC7. This ensures problem-free upgrading within the PREMIUM system.

### ELine 250® RJ45: the concept

ELine 250® RJ45 plug connectors are based on completely redesigned plug connections. Extremely short individual contacts and a multilayer circuit board of a very short design are used. The concept makes parallel conductors largely unnecessary, thus minimising coupling between the individual pairs of contacts.



### Extremely easy to mount!

ELine 250® RJ45 is a convincing solution due to its simple, rapid and flexible (modular) connecting technology. Only three components in one compact zinc die-cast housing – the ELine 250® RJ45 is easy to mount quickly and safely. The clear colour coding virtually makes mounting errors and the resulting additional costs a thing of the past.

### The benefits!

#### Space-saving

The ELine 250® RJ45 is very much smaller than conventional RJ45 plug connectors and provides maximum performance in a small space. The components of the ELine 250® RJ45 system have especially small dimensions.

A triple outlet only takes up the space of a conventional dual outlet. A new panel with 1 HU provides room for 24/48 ports. Of course, the conventional panels in the ELine™ system can also be used via mounting clips.



Protection from incorrect use via RJ11, RJ12 or incorrectly moulded RJ45 work area cords increases safety. The compact ELine 250® RJ45 modules can be mounted in panels and outlets from the front and from the back.

The fully shielded ELine 250® RJ45 offer good electro-magnetic compatibility and supports EN 55022/50082.



## Technical data



### The real Cat. 6!

Thanks to the revolutionary design, a worldwide first, ELine 250® RJ45 goes far beyond all requirements of Class E/Category 6 according to ISO/IEC 11801 and EN 50173, 2<sup>nd</sup> Edition. Measurements and certificates from the accredited test laboratory GHMT prove the excellent electrical characteristics of the system. ELine 250® RJ45 offers maximum performance even in worst case configurations in a 4-connector channel and a 3-connector permanent link. The excellent values for NEXT, ELFEXT and ACR provide maximum headroom in comparison to the standard for all pair combinations up to 250 MHz.

The certification of the ELine 250® RJ45 module according to Category 6 (de-embedded measuring method according to IEC 60603-7-5 and TIA 586 B 2.1) gives the system the rating 'real Category 6'.

### What we recommend today:

Invest in ELine 250® RJ45 for standardised Class E cabling with excellent transmission characteristics, for example in connection with MegaLine® F6-90 S/F and MegaLine® F6-90 S/F flex.

### Compatible outlets/panels etc.

- See PREMIUM series (pages 58–59)

### Category

- Better than Category 5 and Category 6 according to ISO/IEC 11801 and EN 50173 2<sup>nd</sup> Edition for Class D (up to 100 MHz) and Class E (up to 250 MHz)
- Cat. 6 de-embedded according to EIA/TIA-568-B.2-1

### Jack type

- RJ45, Cat. 6 (de-embedded) for 250 MHz performance
- Shielded (ELine 250® RJ45 S, Article number 9ZE30001) or
- Unshielded (ELine 250® RJ45 U, Article number: 9ZE30009)
- Connecting method: punch-down, gas-tight IDC
- Recommended conductors: AWG 23/ ..22
- Colour coding

### Certificates

- Certified by GHMT\* according to:
  - Class E in a 3-connector permanent link
  - Class E in a 4-connector channel
  - According to ISO/IEC 11801 and EN 50173 2<sup>nd</sup> Edition
- Cat. 6 de-embedded

