

Getting started - GTH-C3

corelatus

Declaration of R&TTE Conformance:

This product GTH-C3 complies with the requirements of the EMC Directive 89/336/EEC (EN 300 386 Class B for telecommunication centers, residential, commercial & light industry) and the safety objectives of the Low Voltage Directive (LVD) 73/23/EEC as described in EN 60950.

The EN 300 386 standard includes the following tests. All tests levels are chosen to qualify the GTH-C3 for both indoor & outdoor lines:

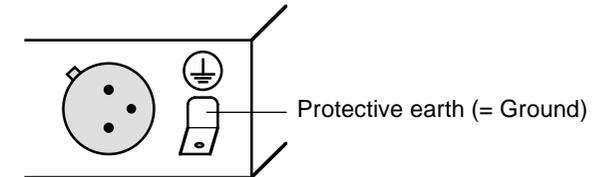
- §5.1 ESD immunity (electrostatic discharge) as per EN 61000-4-2 chassis, openings, repetitive pos & neg 8kV pulses, conductive
- §5.2 EFT immunity (electrical fast transients) as per EN 61000-4-4 class 2 (industrial environments)
signal ports: 500V, DC power ports: 1000V, 5kHz pulse rate
- §5.3 surge immunity as per EN 61000-4-5 class 2 (separated power-logic circuits)
signal ports: 1000V, 1.2/50µsec, 1 pulse/sec
- §5.3 surge resistibility, conducted as per ITU-T K.20 & K.21
signal ports: 1000V, 10/700µsec, 1 pulse/sec no permanent change, signal ports: 4000V, 10/700µsec, 1 pulse/sec fuse replacement ok
- §5.4 continuous conducted RF immunity as per EN 61000-4-6 level 3 (severe electromagnetic radiation environment)
signal & DC ports: 9kHz to 80MHz, 10Vrms
- §5.5 continuous radiated RF immunity as per EN 61000-4-3
80MHz to 1GHz, 3V/m (class 3) & 10V/m
- §6.2 conducted emission as per EN 55022, Class B,
DC ports 20kHz to 30MHz
- §6.3 conducted emission as per EN 55022, Class B,
signal ports 150kHz to 30MHz
- §6.4 radiated emission as per EN 55022, Class B, 30MHz to 1GHz

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Connect ground

Grounding of the equipment is important for safety. This equipment must not be operated unless it is grounded. When installing a unit, the connection to protective ground must be made before any other connections are made. When removing a unit, all signal and power connectors must be removed before disconnecting the protective ground connection. The connector is a blade connector 6,3 X 0,8 mm.

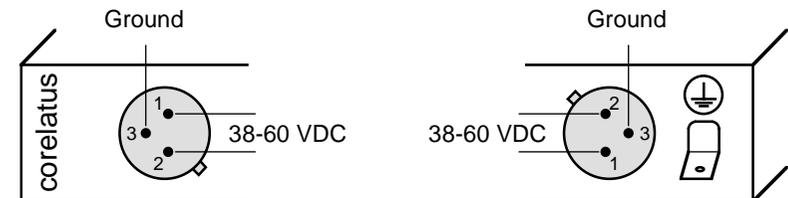
The equipment is intended for use in a location where equipotential bonding has been applied, e.g. telecommunication centre, and which has provision for permanently connected protective earthing conductor. The protective earthing conductor shall be connected to the protective earthing terminal on the equipment by service personell.



Connect power

Power can be connected to one or both inputs simultaneously. If both inputs are powered, power is drawn from the source with the highest voltage. The connection is polarity independent.

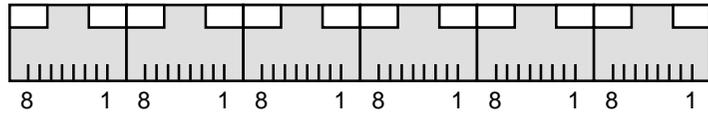
If the supply voltage or the voltage between one pole and (protective) ground becomes greater than 75V an internal crowbar is activated, thereby protecting the equipment from damage. The crowbar is automatically reset when the voltage goes below 75V. The connector type is XLR.



When power is connected the modules boot. The boot process is visible on the leds, see below. The power consumption is typically 6W/module, i. e. a chassis equipped with three modules typically consumes 18W.

Connect Ethernet and E1

Each module is equipped with a connector block as shown below. The connector type is RJ-45.



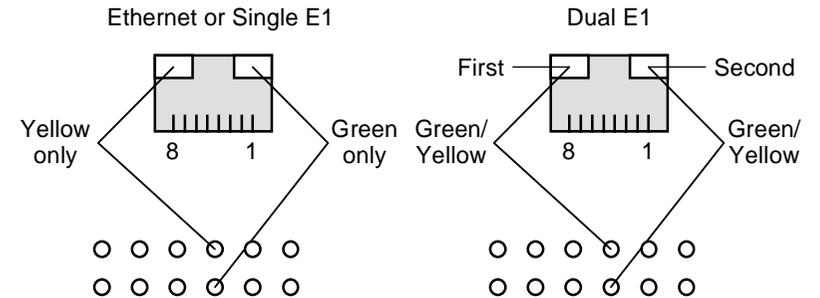
Pin	Ethernet	Single E1	Dual E1
1	TX+	RX	First RX
2	TX-	RX	First RX
3	RX+	Ground	Second RX
4	Termination	TX	First TX
5	Termination	TX	First TX
6	RX-	Ground	Second RX
7	Termination	Ground	Second TX
8	Termination	Ground	Second TX
Case	Ground	Ground	Ground

For connection to a hub or switch a standard straight ethernet cable can be used. For direct connection to an application host a crossed ethernet cable is needed. Shielded ethernet cables must be used.

The default IP address at delivery is:
First ethernet (leftmost): 172.16.1.10

Led indication

The front leds show the same information as the leds in the connector.



At power-on the leftmost yellow ethernet led in the RJ-45 connector is lit to indicate that the module is booting.

During operation the led indication is according to the table below.

Green	Yellow	Ethernet	E1
Off	Off	IP address not assigned	Layer 1 not initialized
Off	On	IP address assigned No link integrity	Layer 1 initialized, framing not recovered
On	Off	Link integrity	Layer 1 initialized, framing recovered
Flash	Off	Traffic	

Additional information

API description and other useful information is available at Corelatus website: www.corelatus.se.

Some software in this product is distributed under the terms of the GNU public licence. <http://www.corelatus.se/gpl> contains information on how to order copies.

No user serviceable parts inside.