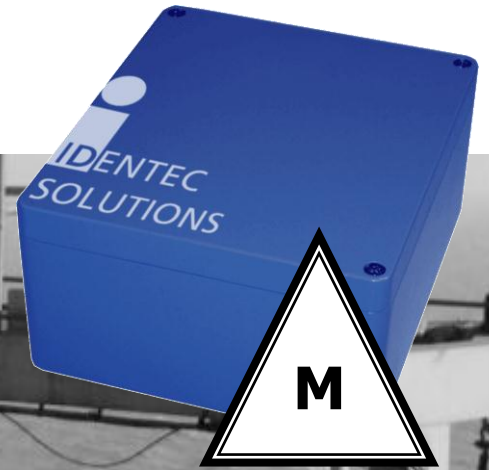


# Modular 2-Way Main

## Long Range Reading Stations



Long Range Reading Stations are designed to provide real time localization of objects with minimal commissioning and infrastructure. A configurable communication range to active transponders ranging from 10 – 500 meters allows for highly accurate data collection with minimal human intervention.

- Seamless interface to WiFi, Ethernet, Fibre, and cellular (GSM/GPRS/EDGE) networks
- 18 months extended warranty
- Die cast aluminium for high mechanical strength (also available in polyester or stainless steel on request)
- Factory fitted bulkhead frames ensures resistance to environmental stress
- Enclosure sealed to IP 65, according to IEC 529
- Industrial grade IP67 connectors for security in harsh environments
- i-BUS interface support
- High quality components and build materials
- Plug-And-Play connectivity with the TRAILBLAZER Application Device
- UHF operating frequencies available for most international ISM band frequency standards
- Available with a selection of field proven antennas, cables and mounting options
- LEDs used to visualize reader power, server connection and transponder detection
- Ability to read up to 2,000 transponders from one reading station, and process more than 100 messages per second
- Automatic local transponder data buffering in the event of backbone communication failure
- Beacon communication mode utilizes a passive in-field reader antenna design to reduce signal noise and interference levels
- Compatible with IDENITEC SOLUTIONS' reference tags for intelligent antenna alarms on weak RFID signals



An IDENITEC SOLUTIONS "Industry Smart" design, means that this product is designed and manufactured to meet specific needs in the oil&gas, mining, tunnelling and construction industries. It is our guarantee for the diversity, ruggedness, and easy installation required for cost-efficient and practical installation in industrial indoor and outdoor environments. A global design backed by our international presence through IDENITEC SOLUTIONS offices, partners and agents on five continents.



Support for the TRAILBLAZER "Auto-Sense", means that this product is designed to be automatically identified, configured and activated by TRAILBLAZER when connected to a compatible network. It allows service engineers to efficiently configure and troubleshoot, and it is your guarantee for software compatibility.

# Long Range Reading Stations

## Modular 2-Way Main

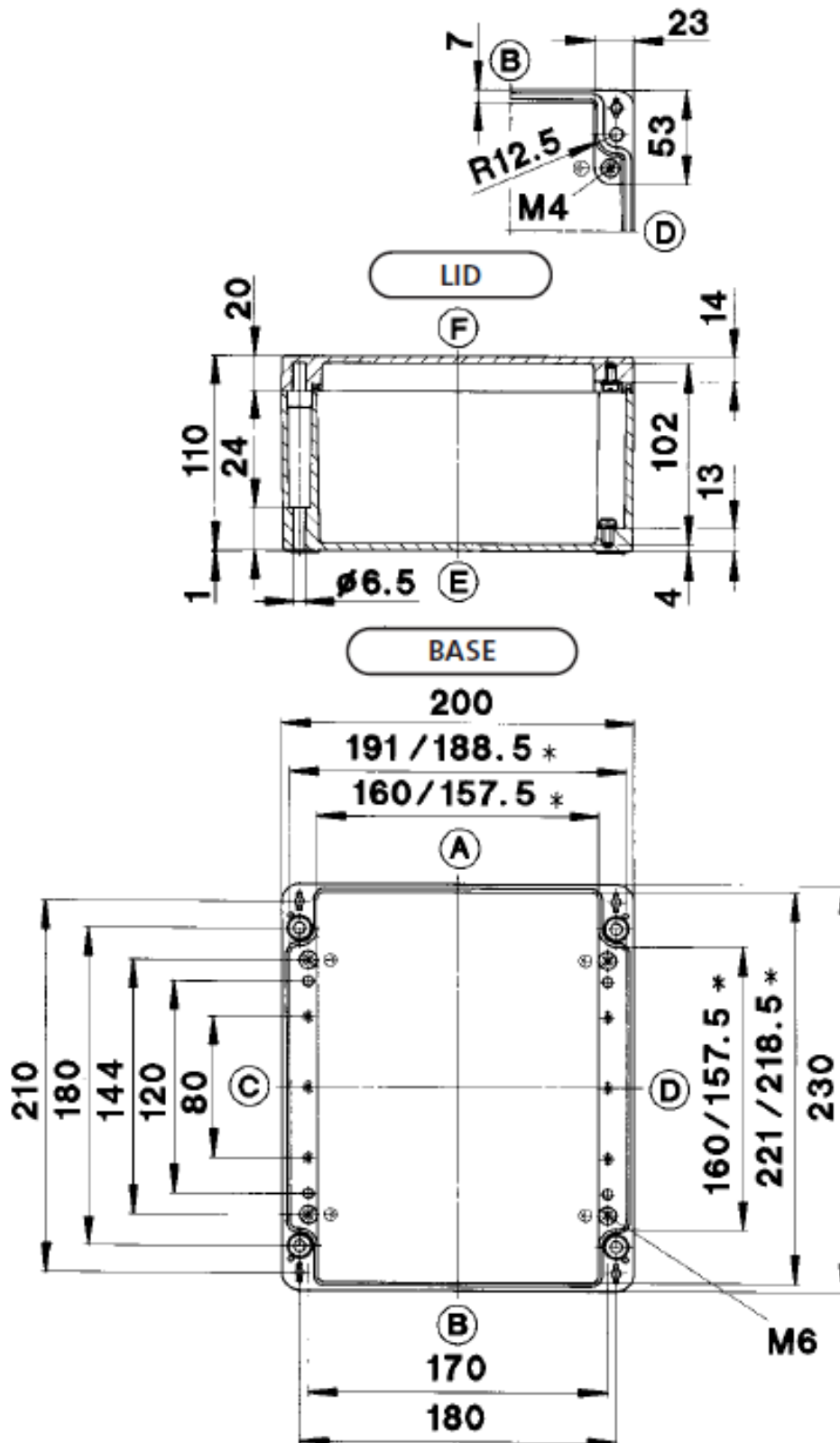


### Technical Specifications

<b>RFID Performance</b>	
Read Range	Up to 100 m (300 ft)
Compatibility	ILR® i-B tags
<b>Air-Air Communication</b>	
Frequency	868 MHz (EU), 915 MHz (NA)
RF Certification	EN 300 220 (EU), FCC part15 (US), Industry Canada
Number of Antennas	Up to 2
Transmission Safeguard	16 Bit CRC
Copy Protection	Rolling Code
Sensitivity	(adjustable) -85 dBm/high, -55 dBm/normal
<b>CPU</b>	
Reader Buffer	Up to 400 Unique Tags
<b>Interfaces</b>	
Interface Placement	Underneath
Data Interface Host	10/100 Ethernet. Optional WLAN/GSM/GPRS/EDGE.
Data Interface Slave	RS422 w/i-BUS; for daisy chaining additional satellite reading stations
Antenna Connectors	2 x Bulkhead female N-Connector
Power Connector	3 Core + GND
Digital IO Connector	4 Core + GND (used for activation of UPS alarm on power failure)
LEDs	5 (Power, Processing, Host, 2 x Antenna transponder detection)
<b>WLAN Security (Optional)</b>	
WEP	64/128-bit encryption (RC4)
WPA/WPA2/802.11i	128-bit TKIP/CCMP (AES) encryption Enterprise mode (802.1X): LEAP (WEP only), PEAP, TTLS, TLS;EAPFAST, GTC, MD5, OTP, PAP, CHAP, MSCHAP, MSCHAPv2, TTLSMSCHAPv2 Pre-shared key mode (PSK/Personal)
<b>Electrical</b>	
Power Source	90-264 VAC; Optional 85-200 VDC, must be advised when placing order.
Input fuse	T2A, high breaking
Output Voltage	27.4 VDC; for docking with UPS and Fiber Reading Stations
Output Current	2.2 A
<b>Environmental</b>	
Operating Temperature	-30 °C to +70 °C (-22 °F to +158 °F). Full power up to +55 °C (8 °F)
Storage Temperature	-40 °C to +80 °C (-40 °F to +176 °F)
Humidity	85 % non-condensing
<b>Physical</b>	
Mounting	Stainless steel 90 degree wall brackets, for mounting without opening lid.
Mounting Bolt Dimensions	Up to M8
Dimensions	200x230x110 (whd), excluding connectors.
Case Material	Die-cast Aluminium (Optional Polyester or Stainless Steel)
Interface Connector Material	RJ45: 360° Shielded, zinc die-cast, powder coating, grey. N-Connector: Brass with SUCOPLATE® (Copper+Zink+Tin) plating
Gasket Material	Neoprene round seal (siliconised)
Lid Screws	Stainless steel, captive, multi-purpose cross head
Coating	RAL 5010
Weight	3,5 kg
Enclosure Rating	IP 65; German Lloyd: No. 91 187 - 84HH, UL: File E 168772 (N)

# Long Range Reading Stations Modular 2-Way Main

Drawing



# Long Range Reading Stations Modular 2-Way Main



## Interface Cabling Requirements and Pin-Out

### i-BUS Connector Interface (Slave Port):

Note:

- The i-BUS uses RS422 levels on its RX and TX Pins, although Ethernet jack/plugs mechanically fit, the device is not Ethernet compatible.
- As the TxD/RxD crossing is done by the pinout of the connectors, simple straight cabling can be used.
- The RJ 45 cabling of the i-BUS must have wires of at least AWG24.



View into the connector = crimp/solder side of plug

Pin	To Host	T568B Color	Description
1	RxD+	White/Orange	
2	RxD-	Orange	
3	TxD+	White/Green	
4	V+ (10 ... 30V)	Blue	i-BUS power supply for satellites
5	V+ (10 ... 30V)	White/Blue	i-BUS power supply for satellites
6	TxD-	Green	
7	GND	White/Brown	i-BUS power supply for satellites
8	GND	Brown	i-BUS power supply for satellites

### Ethernet Connector Interface (Host Port):

Note:

- Do not connect the reading station to a LAN before it has been configured. Please provide the desired IP address to your IDENTEC SOLUTIONS representative when ordering for preconfiguration. If you are not sure if the reading station is preconfigured, please check that the desired IP address has been set. A device with the wrong settings may impede the functioning of your LAN.



View into the connector = crimp/solder side of plug

Pin	To Slave	T568B Color
1	TxD+	White/Orange
2	TxD-	Orange
3	RxD+	White/Green
4		Blue
5		White/Blue
6	RxD-	Green
7		White/Brown
8	GND	Brown

IDENTEC SOLUTIONS AS  
Karthia 3  
4626 KRISTIANSAND  
Norway  
Tel. +47 38 13 91 53  
Fax +47 38 13 96 91  
info@identecsolutions.no

IDENTEC SOLUTIONS  
Deutschland GmbH  
Hertzstrasse 10  
69469 Weinheim  
Germany  
Tel.: +49 (0)6201 9957-0  
Fax: +49 (0)6201 9957-99

IDENTEC SOLUTIONS, Inc.  
Liberty Plaza II, Suite 375  
5057 Keller Springs Rd,  
Addison, Texas 75001  
USA  
Tel: (972) 535 4144  
Fax: (469) 424-0404

IDENTEC SOLUTIONS AG  
Millennium Park 2  
6890 Lustenau  
Austria  
Tel. +43 5577 87387 0  
Fax +49 5577 87387 15

IDENTEC SOLUTIONS  
Australia Pty Ltd  
Suite 4/125  
Terralong Street, Kiama  
NSW 2533  
Australia  
Tel.: +61 2 4232 4999  
Fax: +61 2 4232 4888