

TechNode 500

The ultimate IP interface.

SIA-IP Alarm transmission to Control Station.
SMS alarms and commands.



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Make new business by using a TechNode.

Reduce your installation and maintenance cost and become more competitive by using a TechNode.

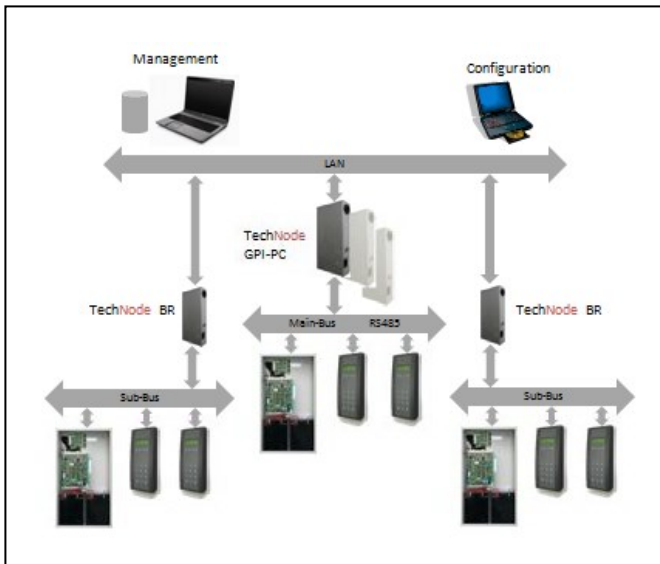
Add more value and new features to existing installation^{*)}.

Improve remote service and extensive diagnostic facilities.

Achieve interoperability between Access and Intrusion systems^{*)} and other corporate facility systems such as Building Automation Systems, Video surveillance systems, Time & Attendance systems, IP Telephony etc.

- Powerful and High Performance IP interface
- Multiple connections to management systems.
- Easy web based configuration using standard browser or TechTool.
- Advanced integrated monitoring features.
- Substitute a wide range of GPI's.
- Significant increase of bandwidth between devices and Management System.
- Create sub-buses over IP.
- Extend Access features.
- Achieve interoperability between TGMS and AXIS camera management.
- IP Alarm transmission. Comply with standard ANSI/SIA DC-09-2007.
- GPRS connectivity
- SMS Alarms and Commands.
- Time Server connections.





Bridge over IP.

Create sub-busses over IP and still keep same bus topology. It requires just one TechNode on top-bus and one TechNode for each bridge (sub-bus). A TechNode IP bus moves the load from the top-bus dramatically. Simultaneously connections with Management system and Configuration tool and 3rd party software.

The TechNode replace following existing GPIs and without requiring any reconfiguration in TGMS:

- GPI-COM
- GPI-BR
- GPI-DNA IP
- GPI-DLM IP,GPI-BRM IP
- GPI-ATX
- GPI-MI (Management with Remote Sites)

SIA-IP.

The TechNode addresses the challenges of Alarm/Event transmission to Control Stations: Flexibility, usability and the ability to select any individual feature as needed. The TechNode offer multiple accounts and multiple IP channels to each account.

GPRS.

In addition the TechNode Model 500 offer integrated GSM/GPRS module for wireless remote management and/or as alarm transmission backup and for SMS alarm messages and SMS commands.

SMS alarms and commands.

SMS alarms are based on SIA alarms with an additional advanced editable SMS formatting and filtering feature. A SMS account supports a various set of SMS commands for getting status and controlling the connected system^{*)}, such as:

- Clear alarm, Get Detector, Zone, and Area status.
- Set and Unset Detector, Zone and Area.
- Get Door Status and controlling Doors.
- SMS Door Release with a specific Card number.

Specifications		
	TN500C	TN500C-GPRS
General		
Dimensions (L x W x H)mm	140 x 67 x 28	
Weight	0.2 kg	0.250 kg
Supply Voltage	10-30 VDC	
Power consumption	Typical: 2.4W Max: 2.8W	Typical: 2.5W Max:5.5 W ¹⁾
Status LEDs	Network Link , Network Activity	
Hardware		
CPU	32-bit Digi NS9210 ARM 9 core	
Memory	2/4 MB Flash + 8 MB SDRAM	
AES	On-chip 256 AES Accelerator	
Environmental		
Operating Temperature:		
Normal Operation	-40 °C to +85 °C	-30 °C to +65 °C
Restricted Operation	-40 °C to +75 °C	
Storage Temperature	-40 °C to +85 °C	
Relative Humidity	5% to 90% (non-condensing)	
Network Interface wired		
Connector	RJ45	
Standard	IEEE 802.3	
Physical Layer	10/100Base-T	
Data Rate	10/100 Mbps (auto-sensing)	
Mode	Full or half duplex (auto-sensing)	
PoE Power Pass-Through	802.3af compliant (Mid- and End-span)	
Network Interface wireless LAN²⁾		
Standard	IEEE 802.11b	
Frequency	2.4 GHz	
Data Rate	Up to Mbps with automatic fallback	
Receive Sensitivity	-82 dBm @ 11 Mbps	
Antenna	RP-SMA	
WLAN Security		
WEP	64/128-bit encryption (RC4)	
WPA/WPA2/802.11i	128-bit TKIP/CCMP (AES) encryption PEAP, TTLS, TLS, EAP-FAST, GTC, MD5, OTP, PAP, CHAP, MSCHAP, MSCHAPv2	
Connections		
RS485	4 pin Terminal (D-, D+, GND, V+) + RJ11	
RS232	3 pin Terminal (TxD, RxD, GND)	
Tamper contact	yes	
RS232	3 pin Terminal (TxD, RxD, GND)	
Antenna	SMA – female 50 Ω	

¹⁾ Indicate average consumption during Tx burst for GSM (worst case 850MHz/900MHz), GPRS class12 and RF power nominal 1W (worst case). I_{max}: 230 mA at 24V, I_{max}: 460 mA at 12V

²⁾ Wireless LAN is optional.

GSM/GPRS specifications	
Frequency Band	Quad Band : GSM 850/900/1800/1900 MHz
GSM class	Small MS
Output power	Class 4 (+33dBm ±2dB) for EGSM850 Class 4 (+33dBm ±2dB) for EGSM900 Class 1 (+30dBm ±2dB) for GSM1800 Class 1 (+30dBm ±2dB) for GSM1900
Data Transfer	GPRS: • Multislot Class 12 • Full PBCCH support • Mobile Station Class B • Coding Scheme 1 – 4
SMS	Point-to-point MT and MO Cell broadcast Text and PDU mode Storage: SIM card plus 25 SMS locations in mobile equipment

Regulatory and Approval Information	
Subject	Standard
EMC	EN 301 489-1 EN 301 489-17
Safety test	EN 60950-1:2006
General tests for alarm transmission equipment	EN 50136-1-1:1998 incl. A1:2001 EN 50131-1:2006 EN 50136-2-1:1998
Security Alarm Test	EN 50131-1:2009

TN500C-GPRS-SIA conforms to environmental class II and is compliant to ATS 6 compatible with Security Grade 3.

TechSolutions creates value-adding integrated solutions for the security business systems and is a solutions partner for systems integrators to create network-based surveillance and alarm management solutions that are interoperable with different systems and devices.

*) TechNode 500 supports interoperability with **THOR** and **ThorGuard** systems