

# Star Connection for Your Company



- Significant cost savings on calls
  - Voice and SMS transmission
  - 4 SIM cards per GSM channel
  - 2 ISDN PRI interfaces
    - VoIP interface
    - Sophisticated LCR
- Remote control and management

## 2N BlueStar

### Star Connection for Your Company

2N BlueStar is a solution designed for medium and large companies with a high proportion of calls to and from GSM networks. The main benefit you can gain by implementing this solution in your company are dramatic savings on fixed-to-mobile calls. A highly sophisticated management of outgoing and incoming calls cuts GSM and PSTN call costs significantly. Thanks to the efficient Least Cost Routing (LCR), the user can be sure that all calls are always routed in the cheapest possible way (according to free minutes on SIM cards, prefixes of GSM providers, etc). The modularity of the BlueStar gateway enables the user to create a tailor made solution according to the company needs. The user has the possibility to utilize up to 16 GSM channels, 2 PRI ports and a VoIP interface. There are two main advantages of 2 PRI's over just 1 PRI:

- no need of any additional PRI card in the PBX
- no need to change the configuration of the PBX, everything is programmed in the gateway.

In case you use VoIP in your company infrastructure, you need not install any external VoIP gateway because BlueStar can be equipped with a VoIP interface. The SMS server – a network application for SMS sending and receiving – is one of additional software options, which provide BlueStar users with another communication tool. The delivery status of any messages is obtained automatically. The Dynamic Clip Routing feature arranges that all incoming calls are routed to the right extension according to a flexibly changing called number database. SMS and Voice CallBack are additional software options, which contribute to higher savings on incoming calls to the BlueTower gateway. It's a unique software solution with authorization and restriction capabilities and it's mostly used by the company staff who are often in the field. 2N BlueStar can be managed and monitored remotely via the IP or using ISDN modems or by a special unit called the Remote Control Unit (RCU), which provides a very secure and user-friendly management.

Wireless  
Modules  
by Siemens  
embedded



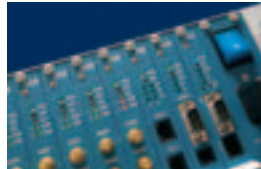
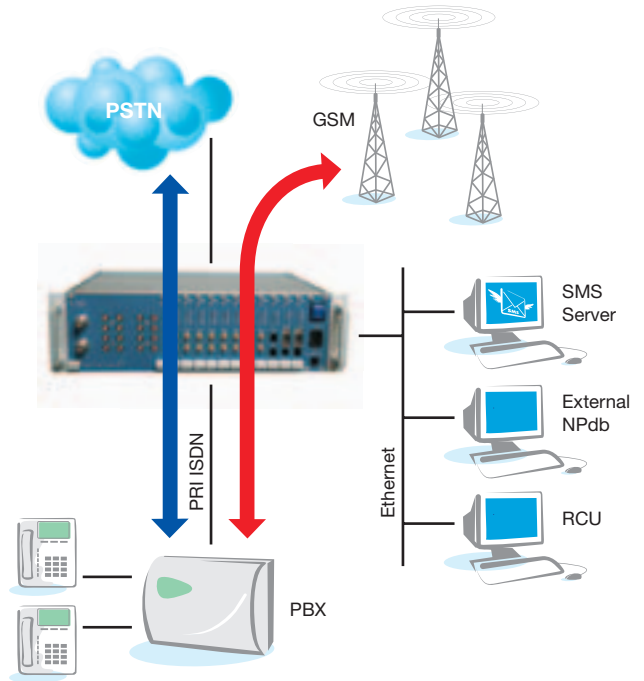
BLUESTAR 



# 2N BlueStar

## Features:

- Up to 16 GSM channels (=16 simultaneous calls)
- 2 ISDN PRI interfaces – DialThru functionality
- VoIP interface\*\*
- Efficient Least Cost Router (LCR) according to free minutes, prefixes of GSM operators, calling time etc.
- SMS server – SMS sending & receiving support
- SMS & Voice CallBack
- Dynamic Clip Routing
- GSM networks monitoring
- Support of external number portability database (NPdb)
- Optional integrated antenna splitter
- Comfortable and user-friendly remote control and maintenance
- Worldwide use (all frequencies are supported)\*



Item description	Part No.
Basic unit (CPU, PSU, AUX and 2x PRI)	507210E
GSM card (2GSM channels, 4SIM holders per GSM channel) with 2 Siemens TC35i modules (900/1800 MHz)	507202E
GSM card (2GSM channels, 8SIM holders per GSM channel) with 2 Siemens TC35i modules (900/1800 MHz)	5072022E
Antenna splitter (16GSM channels to one directional antenna)	5060261E
BlueStar SMS Server	5072994E
BlueStar Look Up licence	5072993E

## Technical parameters

PRI ISDN	
Number of ports	1xNT/TE or 1xNT+1xTE
ISDN PRI details	S interface signaling EDSS1 (Q.931) QSIG (1x PRI) SS7 (ISUP)**
Synchronization	Connection via RJ45 connectors Master/Slave
VoIP**	
Voice signalling	SIP
Number of voice channels	16
Codecs	G.711 PCM at 64 kbps G.726 and G.727 E-ADPCM at 16 to 40 kbps G.729/Annex A CS-ACELP at 8 kbps G.723.1 (optional) MP-MLQ/ACELP at 6,3/5,3 kbps
Echo Cancellation	G.168-2000; max. echo length 25 ms (15 ms for G.729A)
VAD/CNG (Silence Suppression)	G.729B for G.729A coders G.723.1A for G.723.1 coders
PCM Companding	A-law/u-law (selectable)
GSM	
GSM channels	From 2 to 16 (step 2)
Network types	850/900/1800/1900MHz*
GSM engine	Siemens TC35i, MC45i, MC46i
SIM card	Small plug-in, 3 V
Antenna connector	SMA (female) Impedance 50 Ω
Antenna splitter	
Integrated over voltage protection	
Input connector	SMA (female) Impedance 50 Ω
Output connector	N type female, impedance 50 Ω
Isolation between two channels	> 20 dB

Antenna	
With splitter	High gain GSM YAGI antenna
Without splitter	Small GSM discreet antennas
Mains	
Power supply	100-240 V/50-60 Hz or 36-76 V DC****
Power input	Max. 230 VA
Local control	
	2x RS232 serial connection D-Sub 9 pin connector Transmission rate 57600 bps
Remote control	
	External Analog, ISDN or GSM modem TCP/IP (Telnet protocol) PRI ISDN DATA HTTPS, SSH, SNMP, SMS, SMTP***
Others	
Dimensions	482x133x360 mm (84HPx3Ux360 mm)
Weight	9.8 kg
Operating temperature	0-50 °C
Relative humidity	Max 95 % at 40 °C
Recommended	Air condition, Line interactive UPS

\* depends on the GSM engine type

\*\* optional

\*\*\* with the 2N RCU

\*\*\*\* separate part number, must be mentioned in your order