

# 2N StarGate

Your Highway to GSM / 3G Networks



- ★ Up to 32 GSM / 3G channels (hot swappable)
- ★ Up to 8 SIM cards per channel
- ★ Up to 2 ISDN PRI interfaces
- ★ VoIP interface
- ★ Efficient Least Cost Router (LCR) according to free minutes, prefixes of operators, call time, etc.
- ★ Dynamic Clip Routing
- ★ Large memory (245 thousand) for detailed call data records
- ★ Voice Callback and SMS Callback (optional)
- ★ Support of SMS sending and receiving
- ★ Antenna splitter - 2 high gain YAGI antennas for the whole system
- ★ Comfortable remote control and management
- ★ GSM network monitoring / SMS at no answer
- ★ External routing machine (ERM)

**The 2N StarGate is a VoIP / PRI - GSM / 3G gateway with up to 32 GSM / 3G channels.**

**It's an ideal equipment for large corporations with high proportion of calls to GSM / 3G networks and for alternative carries as the 2N StarGate gateway is a great tool for terminating calls providing maximum performance, stability and reliability.**

Thanks to its scalability you can create a tailor made solution according to your needs. You can benefit from a mixture of GSM / 3G channels, 2 ISDN PRI ports, VoIP interface and additional software solutions. If 2N StarGate is used, you gain substantial savings on calls, as all calls routing for GSM / 3G networks are routed through this gateway. Thanks to the efficient and sophisticated LCR (Least Cost Router), the calls are always routed in the cheapest possible way as there is taken into consideration time of call, prefixes of operators, free minutes on the SIM cards. As 2N StarGate gateway has been enhanced with a VoIP interface, there is no need to install an external VoIP gateway.

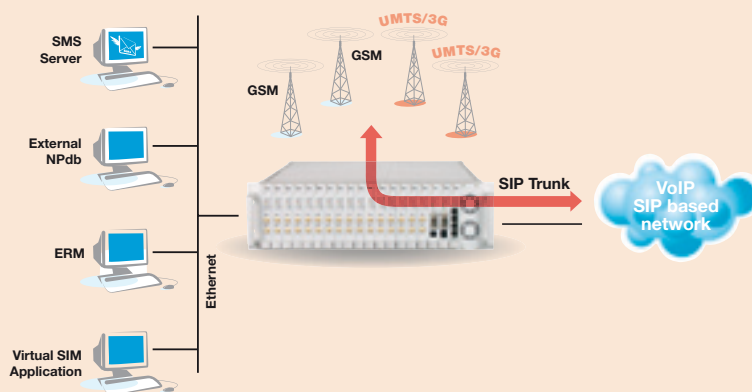
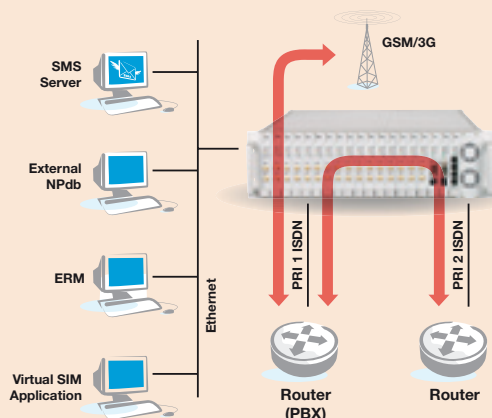
There are 2 main advantages of 2 PRI's over to just 1 PRI port:

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

SMS and Voice CallBack is a software solution with authorization and restriction capabilities. It's mostly utilized by company staff who are in the field. This software contributes on higher savings on calls.



# Case study



## Technical Parameters

### PRI ISDN

<b>Number of ports</b>	1x NT/TE or 1x NT + 1x TE
<b>PRI ISDN details</b>	S interface signalling EDSS1 (Q.931) Connection via RJ45 connectors
<b>Synchronization</b>	Master/Slave

### VoIP\*

<b>Voice signalling</b>	SIP
<b>Number of voice channels</b>	30
<b>Codecs</b>	G.711 PCM at 64 kbps G.729 G.723

### PCM Companding

	A-law/u-law (selectable)
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### GSM

<b>GSM channels</b>	From 2 to 32 (step 2)
<b>Network types</b>	850/900/1800/1900 MHz**
<b>GSM engine</b>	Siemens TC35i, MC45, MC46, Wavecom
<b>Transmitter power</b>	2 W (1 W)
<b>SIM card</b>	Small plug-in, 3V
<b>Antenna connector</b>	SMA (female) Impedance 50 Ω

### 3G

<b>UMTS channels</b>	From 2 to 32
<b>Network type</b>	UMTS
<b>UMTS engine</b>	Sierra Wireless
<b>USIM</b>	Small plug-in, 3V
<b>Antenna connector</b>	SMA (female), Impedance 50 Ω

### External antenna splitter

	Integrated overvoltage protection*
<b>Input-output insertion loss</b>	8–15 db
<b>Input connector</b>	SMA (female) Impedance 50 Ω
<b>Output connector</b>	N type (female), impedance 50 Ω
<b>Isolation between two channels</b>	> 20 dB

### Antenna

<b>With splitter</b>	High gain YAGI
<b>Without splitter</b>	Small discreet antennas

### Mains

<b>Power supply</b>	100–240 V/50–60 Hz or 36–70 V DC***
<b>Power input</b>	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)
	x.75 transmission via PRI ISDN

### Others

<b>Dimensions</b>	482x133x360 (84HPx3Ux360 mm)
<b>Weight</b>	9.8 kg
<b>Operating temperature</b>	20–50 °C
<b>Relative humidity</b>	Max 95 % at 40 °C
<b>Recommended</b>	Air condition, Line interactive UPS

\* optional

\*\* depends on the GSM engine type

\*\*\* separate part number



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