

# PSI-MODEM-BASIC/USB

## Industrial Modem

### INTERFACE

Data sheet  
103907\_en\_01

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## 1 Description

The DIN rail-mountable **PSI-MODEM-BASIC/USB** modem is specifically designed to meet industrial requirements for remote maintenance. It provides access to industrial PCs, machines and systems anywhere in the world via dial-up line connections according to the V.34 and V.90 standard.

Power supply via USB-Port. No external 24 V power supply system necessary.

To ensure error-free operation even in harsh EMC conditions, the device has high-quality electrical isolation and integrated surge protection. The modem also features an integrated automatic "Sleep" function to increase battery life. Modem startup is very easy using plug and play.

The modem can be used worldwide.

### 1.1 Features

- For industrial PCs, for universal use
- Supply voltage via USB port
- High-quality electrical isolation
- Slim design width of 22.5 mm
- Easy startup using plug and play
- 3964R-compatible



**WARNING: The PSI-MODEM-BASIC/USB is designed exclusively for SELV operation according to IEC 60950/EN 60950/VDE 0805.**

**The modem must only be connected to devices, which meet the requirements of EN 60950 ("Safety of Information Technology Devices").**



Make sure you always use the latest documentation.  
It can be downloaded at [www.phoenixcontact.net/download](http://www.phoenixcontact.net/download).



This data sheet is valid for all products listed on the following page:

## 2 Ordering Data

### Modem

Description	Type	Order No.	Pcs./Pck.
Industrial analog modem Scope of supply: Modem, CD with driver, manual, and USB cable	PSI-MODEM-BASIC/USB	2313436	1

## 3 Technical Data

### Power Supply

Supply voltage	5 V DC via USB-Port
Current consumption	
Nominal operation	< 100 mA (at 5 V DC)
Sleep mode	< 40 mA (at 5 V DC)

### USB Interface

Connection	Mini USB, type B
Transmission speed	USB 2.0
LED indicator/data indicator	TD (green LED), data to modem (dynamic) RD (yellow LED), data from modem (dynamic)
LED indicator/control signal indicator	DTR (yellow LED), Data Terminal Ready DCD (yellow LED), Data Carrier Detect

### PSTN Port (a/b Line)

Connection	6-pos. RJ12
Shield	Via metal foot on EN DIN rail
Operating modes	Dial-up modem, 2-wire half/full duplex
Dialing procedure	Multiple frequency/pulse dialing, configuration via software
Transmission speed	Automatic adjustment according to V.8
DCE/DCE	300 baud ... 56 kbaud
Fax	2400 baud ... 14.4 kbaud
Compatibility	ITU V.42bis, V.42, V.92, V.90, V.34 extended, ITU V.32bis, V.32, V.21, V.22bis, V.22, V.23, ITU V.17
Command set compatibility	AT standard command set and extended V.250 basic command set
Error correction	V.42 (LAP-M or MNP 2 to 4)
Data compression	V.42bis (throughput 4:1), MNP 5 (throughput 2:1)
Data indicator	Green LED (OH), off the hook Yellow LED (AA), automatic answer, flashes during selective call acceptance
Acoustic signal	Integrated piezo
Startup diagnostics	Selftest, visualization via LEDs (controller, RAM, EEPROM, DSP)
Telecommunications approvals	TBR21, US: ET9DT10BPSI56, IC:4720-PSI56

### General Data

CE conformance	Conformance according to R&TTE Directive 1999/5/EC
Approvals	UL (in preparation)
Telecommunications approvals	TBR21, TIA-968-A, CS-03 for Europe, USA, and Canada
Ambient operating temperature range	0°C ... +55°C
Housing type	ME 22,5 with DIN rail connector and ground contact
Housing material	PA 6.6-V0, green
Housing dimensions (H x W x D)	99 mm x 22.5 mm x 114.5 mm
Weight	155 g
Functional earth ground	To EN DIN rail in the housing
Vibration resistance	5g according to DIN EN 60068-2-6, 1.5 h each in x, y, and z direction

**General Data**

Shock test according to IEC 60068-2-27

Operation  
Storage15g, 11 ms, half-sine shock pulse  
30g, 11 ms, half-sine shock pulse

Free fall according to IEC 60068-2-32

1 m

Degree of protection

IP20

Separate ground levels

PSTN // USB

Test voltage

1.5 kV AC, 50 Hz, 1 min. between all ground levels according to EN 61010-1/  
VDE 0411-1 and EN 60950**Conformance According to R&TTE Directive 1999/5/EC****EMC**

EN 61000-6-2

Generic standard for the industrial sector

Immunity to interference  
(electromagnetic compatibility)**Safety**

EN 60950

Protection of personnel with regard to electrical safety

**Noise Immunity Test According to EN 61000-6-2<sup>1</sup>**

Electrostatic discharge (ESD)

EN 61000-4-2

Criterion B<sup>2</sup>8 kV air discharge  
6 kV contact discharge

Electromagnetic HF field

EN 61000-4-3

Criterion A<sup>3</sup>Amplitude modulation  
Pulse modulation10 V/m  
10 V/m

Fast transients (burst)

EN 61000-4-4

Criterion B<sup>2</sup>  
Criterion A<sup>3</sup>Signal  
Supply2 kV/5 kHz  
1 kV/5 kHz  
2 kV/5 kHz

Surge current load

EN 61000-4-5

Criterion B<sup>2</sup>Signal  
Supply1 kV  
2 kV

Conducted interference

EN 61000-4-6

Criterion A<sup>3</sup>

10 V

**Noise Emission Test According to EN 61000-6-4**

Noise emission of housing

EN 55022

Limiting curve B

<sup>1</sup> EN 61000 corresponds to IEC 61000<sup>2</sup> Criterion B: Temporary adverse effects on the operating behavior, which the device corrects automatically.<sup>3</sup> Criterion A: Normal operating characteristics within the specified limits.

## 4 Application

The PSI-MODEM-BASIC/USB modem is suitable for universal and international use as an analog dial-up modem.

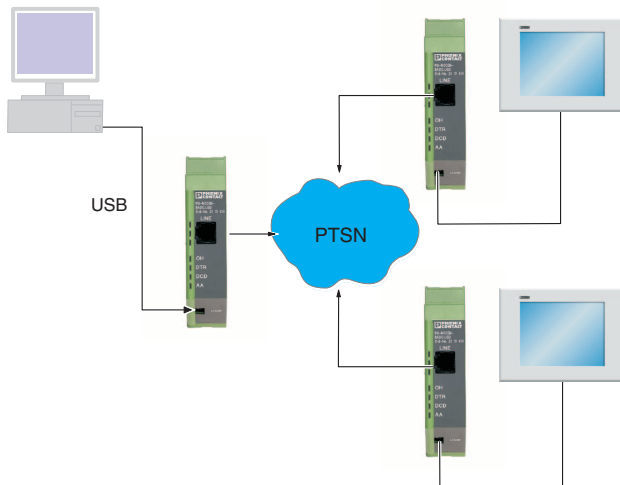


Figure 1 Dial-up operation

The modem can be used for the following applications:

- Remote monitoring of systems and machines
- Remote control
- Remote system diagnostics
- Production data acquisition