

The GSM Trainer ST2133 is a modem or mobile equipment for transmission of voice and data calls as well as SMS (Short Message Service) in GSM Network.

To control the GSM modem there is an advanced set of AT commands according to GSM ETSI (European Telecommunications Standards Institute) 07.07 and 07.05 implemented. The GSM standard has established itself across continents.

The trainer is well suited for studying AT commands by camping to real networks using SIM card.

- ▣ Low Cost
- ▣ Simple / Easy Operation
- ▣ Easy understanding of AT commands
- ▣ Real Time operation
- ▣ External Antenna

Technical Specifications

GSM capability : GSM 900 / 1800, E - GSM
 GSM data services : Asynchronous, Transparent & Non Transparent modes, 14.4 kbits/s
 SIM Interface : 3 V

RF characteristics :

Receiver

EGSM Sensitivity : < -104 dBm
 DCS Sensitivity : < -102 dBm
 Selectivity @ 200 KHz : > +9 dBc
 Selectivity @ 400 KHz : > +41 dBc
 Dynamic range : 63 dB
 Intermodulation : > -43 dBm
 C-channel rejection : ≥ 9 dBc

Transmitter

Maximum output power : 33 dBm ± 2 dB (EGSM)
 Maximum output power : 30 dBm ± 2 dB (DCS)
 Minimum output power : 5 dBm ± 5 dB (EGSM)
 Minimum output power : 0 dBm ± 5 dB (DCS 1800)
 Noise in 925 - 935 MHz : < -67 dBm
 Noise in 935 - 960 MHz : < -79 dBm
 Noise in 1805 - 1880 MHz : < -71 dBm
 Phase error at peak power : < 5° RMS
 Frequency error : ± 0,1ppm max
Power supply : 9 V
Current consumption : Max 500 mA
Dimension (mm) : W 255 × D 155 × H 80
Weight : 360 grams (approx.)



Experiments that can be performed

- GSM Theory & Standards
- Understanding of GSM technology, its network, GSM capability & data services.
- Understanding RF environment & study of GSM network by actually connecting to the GSM environment by any service provider.
- Command Level Study
- Real Time study of GSM 07.05 & 07.07 commands in various Categories :
 - Command concerning modem & sim card hardware
 - Network registration commands
 - Call control command
 - Call setting commands
 - Call information commands
 - Phone Book commands
 - Serial link control commands
 - Message setting commands
 - Storing/restoring commands
 - Error message handling & survey & many more....

Included Accessories

Power adapter - 9 V / 500 mA
 RS - 232 serial cable
 GSM Antenna (900/1800) and cable (30 cm.) with coaxial plug
 Handsfree kit
 CD
 Manual

