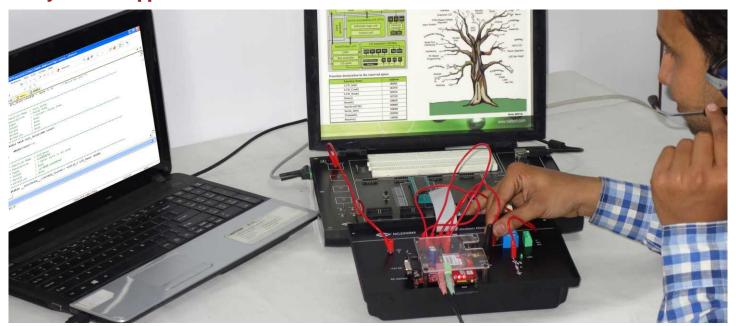**Nvis MC20GSM GSM Application Module** is built with Dual Band GSM/GPRS engine, and works on 900/ 1800 MHz. The Modem comes with RS232 and USB interface, which allows the user to connect PC as well as microcontroller with UART Interface. The GSM/GPRS Modem has internal TCP/IP stack to enable the user to connect with internet via GPRS. It is suitable for sending SMS, Voice as well as DATA transfer application in M2M interface. Using this Modem, users can make audio calls, send SMS, read SMS, attend incoming calls and internet etc., through simple AT commands.

Features

▸ **Easy understanding of AT commands**
▸ **PC Interface facility using RS232 and USB**
▸ **Expansion socket for Micro controller interfacing**
▸ **Onboard relay with NO, NC, C connections**
▸ **Analog audio interface**
▸ **SIM card socket available**
▸ **Headphone facility available**
▸ **Inbuilt Powerful TCP/IP protocol stack for internet data transfer over GPRS.**

Scope of Learning

▸ Understanding concepts of GSM real time operation
▸ Interfacing of PC via RS232/USB
▸ Study of AT commands
▸ Receive, send or delete SMS messages in a SIM
▸ Read, add, search phonebook entries of the SIM
▸ Make, Receive, or reject a voice call
▸ Automation application using GSM
▸ Study of GSM interfacing with microcontroller
▸ Study of GPRS interfacing using TCP client server

Note:

▸ MC20GMS module is compatible with Scientech 620X Series and Nvis 5001A/2/3/4A/5 Series Microcontroller development platforms.
▸ To run MC20GSM module, MC04 module is required for Nvis 5002/3/4A/5
▸ SIM card should be owned by customer

An ISO 9001: 2008 company

Designed & Manufactured in India by :

Nvis Technologies Pvt. Ltd.

141-A, Electronic Complex, Pardesipura, Indore - 452 010 India
Tel.: 91-731-4211500, E-mail: info@nvistech.com, Website : www.NvisTech.com

Technical Specifications

GSM capability	:	GSM 900 /1800, 850/1900 E-GSM
GSM data services	:	Asynchronous, Transparent & Non Transparent modes. 14.4 K bits/s
SIM Interface	:	3 V
Relay	:	5V/5A
20pin Socket	:	Dedicated socket for Micro controller interfacing
PC Communication	:	RS232/USB

Specifications for GPRS Data

- GPRS class 10   :   max. 85.6 Kbps (downlink)
- PBCCH support
- Coding schemes CS 1, 2, 3, 4
- PPP-stack

Specifications for CSD Data

- USSD
- Non transparent mode

Specifications for SMS via GSM/GPRS

- Point to point MO and MT
- SMS cell broadcast
- Text and PDU mode

Specifications for Voice

- Tricodec
  Half rate (HR)
  Full rate (FR)
  Enhanced Full rate (EFR)
- AMR
  Half rate (HR)
  Full rate (FR)
- Hands-free operation
- Echo suppression

Power Supply	:	From Scientech 620X Series and Nvis 500X Series Microcontroller development platforms.
Product Tutorial	:	Online on www.NvisTech.com
Interface	:	20 pin FRC cable
Dimensions (mm)	:	W 255 x D 155 x H 80
Weight	:	360 gms (approximately)
Included Accessories	:	Patch cords:5 nos., DB9 cable: 1 no. Head phone : 1no.

Subject to Change,