

R&D Project

R&D Division



ICARUS DUO I2 : TRAINER FOR GPS & GSM /GPRS

POLYTECH SA is pleased to announce the implementation / completion of its new product **ICARUS DUO I2**, a trainer for **GPS** and **GSM/GPRS**. ICARUS is part of the state-of-the-art LHP 4000 - Advanced Telecommunications laboratory, operating in educational institutions around the world, designed and produced in Greece.

AUXILIARIES

ICARUS DUO I2 trainer is provided with all necessary equipment to be fully operational with: ICARUS DUO I2 trainer is provided with all necessary equipment to be fully operational with:

1. USB connections ,dual
2. Microphone and head set
3. Power-on switch
4. Power Led
5. GPS Antenna
6. GSM/GPRS Antenna
7. Battery pack
8. Software - SB ARDicon V.1.18
9. USB Cables 2 pcs

INTRODUCTION

ICARUS DUO I2 is a dual purpose microcontroller training system for vocational training on GPS/Satellite communication as well as the commands for the control and communication of GSM devices. The system integrates a GPS and a GSM/GPRS module along with their respective antennas and the required peripherals to be fully operational. The GSM /GPRS Module is a complete Quad-band GSM/GPRS chip based module in a SMT type while the GPS module is based on the NEO 6 u-blox GPS chip.

The unit is connected to a PC computer with a USB cable. It is powered up either by a AC/ DC adaptor (9V, 2A) or when used outside the classroom by a battery pack of 9V/2 A provided with the set.

The system is accompanied by the ARDicon software of POLYTECH that provides command coding for the control and functioning of the GSM and GPS modules as well as step by step lab experiments on the subject. The application commands control the functioning of the trainer and all data sent or received from the corresponding communicating unit are recorded, The software commands can control the GPS and GSM/GPRS operation and communication data for evaluation and analysis.

The software provides an on-line help menu guide for the GPS functioning and the AT command functions in a didactic format and experimental procedure.

FEATURES

ICARUS DUO I2 trainer operates as a normal mobile phone with all communication features of a commercially operated GSM/GPRS mobile with GPS features and Internet connectivity.

Additionally, is an open didactic platform offering to the students the low level code programming of the device using the AT commands and other functions available for programming the internal trainer microcontroller which is ATMEGA 328P-PU. ARDicon provides many experiments in I./O microprocessor controls.

The trainer base is a compact, easily accessible plastic case enclosure. It can be easily carried outdoors for testing. It allows the SIM card insertion for the GSM / GPRS module from the top of the trainer case.