

# Datasheet

## SEMKEY Mobile Workplace Version G2 V.2010

### Description

SEMKEY is a standard 16 GB to max. 64 GB USB2.0 securely bootable mobile desktop device. This device will allow you to use many different host computer platforms to boot into your own personalized Windows XP or Windows 7 or Linux. This enables you to connect to the Internet, access all your programs, work with your personal configurations, edit and save documents online and offline, and many more - without altering the host computer in any way. It comes with full disk hardware encryption security, fingerprint authentication, secure network connections. SEMKEY is optimized for large managed client architectures.

### Layout & Specifications



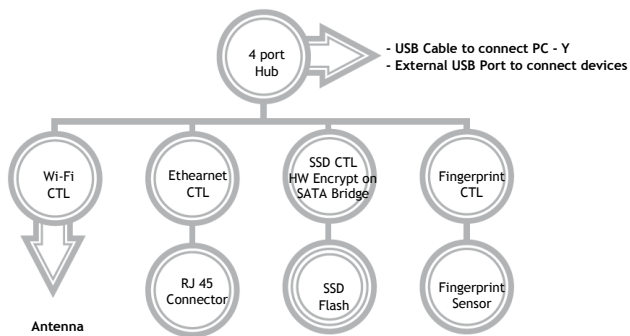
Dimensions:	Millimeters ( $\pm 1.00$ ): X = 54.0 Y = 98.0 Z = 16.3
Weight:	55g
Power Supply (Rating):	5V DC from two USB ports (DC 5V , 1.0A)
Operating Temp:	5°C (41°F) to 55°C (131°F)
Storage Capacity:	15,5GB / 31GB / 63GB
Connection Interface:	USB2.0 (computer uplink) USB (power input) RJ45 (10/100 Fast Ethernet wired network port) 802.11b/g (wireless network protocol)
Host Computer Minimum System Requirements:	USB-bootable PC, Notebook or Thin Client with Windows XP compatible components 1,3 GHZ CPU / Whitelist Bios SEMKEY Desktop: 1 GB RAM Virtual Desktop: 2 GB RAM



### Features

- Built-in Windows XP Embedded or Windows 7 emb. operating system, optional MSFT Office 2007 or other
- Nearly every Client Software / Program is installable on SEMKEY Mobile Desktop
- Boot your Windows and access the internet on many different host computer bios platforms/ thin clients or work offline
- Integrated high quality fingerprint reader for simple and secure windows log-on
- Full Disk 256 bit AES Hardware Encryption and optional Software Encryption (Full Disk / Partitions)
- Internal Wi-Fi wireless adapter and Ethernet
- Shock Proof SSD-Design for reliable computing and everyday travel - in multiple colours
- No hard drive, OS, or network card required on host PC
- SSD Controller with 16GB / 32GB/ 64GB of NAND Flash memory SLC / MLC for storing files and progs
- Up to three different partitions configurable: CD - read only/read-write (Hidden Sys, Progs, User Data)
- External USB data port to connect existing devices e.g. smartcard reader, certificate token and more
- LED power/data transfer activity indicator
- High-speed Plug and Play USB2.0 compliant
- Compact USB powered device - no external power or battery necessary (easy fold-out Y-USB connect)
- Internal Wi-Fi wireless internet adapter
  - Compatible with IEEE 802.11b & g specifications
  - Dynamic data rate scaling at 54, 48, 36, 24, 18, 12, 9 and 6Mbps (802.11g)
  - Dynamic data rate scaling at 11, 5.5, 2 and 1Mbps (802.11b)
  - Supports Wi-Fi Multimedia Quality of Service
  - Supports wireless data encryption with 64/128-bit WEP standard security, WPA, WPA-PSK advanced security, (Windows 98SE / ME / 2000 / XP), WPA2, WPA2-PSK maximum security (Windows 2000 and XP)
  - Compliant with FCC Part 15.247 (US) & ETS 300 328 (Europe)
- Ethernet port for connecting to wired networks
  - Integrated 10/100 Fast Ethernet controller IEEE 802.3 10BASE-T/100BASE-TX compatible

## Block Diagramm



## Pinouts

Pin No.	Pin Name
01	VCC
02	USB-
03	USB+
04	VSS
Pin No. (Power port)	Pin Name
01	VCC
02	VSS

## Specifications

Storage Capacity	16 GB 32 GB / 64 GB
Data Retention	10 years
Erase Cycles	> 100,000 times
USB Connector Durability	10,000 times
System Performance	Read: 30MB/sec (max.), Write: 25MB/sec (max.)
Power Supply	5V DC from two USB ports, 1A
Temperature Range	Operation: 0-40 °C, Non-Operating -10 °C - 70 °C
Certificates	CE
Radio Technology	IEEE 802.11b (DSSS), IEEE 802.11g (OFDM)
WLAN Frequency Range	2412 MHz - 2462 MHz (FCC), 2412 MHz - 2472 MHz (ETSI), 2400 MHz - 2497 MHz (Japan)
Media Access Protocol	CSMA/CA with ACK
Channel	USA: 1~11, Europe: 1~13, Japan: 1~14
Wireless Range Coverage	Indoor: 35~100 meter (depends on environment) Outdoor: 100~300 meter (depends on environment)
Antenna Type	PIFA ; Gain:0 dBi
Ethernet	Integrates 10/100Mbps Fast Ethernet MAC/PHY IEEE 802.3 10BASE-T/100BASE-TX compatible



Dimension: 54 x 98 x 16.3 mm

## Pin Identification

Symbol	Function
USB-	USB differential signal
USB+	The pairs are used to transmit Data / Adress / Command
VSS	Ground
VCC	USB power input