

# Satellite 100CS

## Technical specifications



### Processor

| Model                          | Processor  | Clock speeds                                     |
|--------------------------------|--|--|
| Satellite 100CS<br>Technology) | Intel Pentium, 75 MHz<br>(2.9-volt core usingVoltage | 75 MHz internally<br>50 MHz externally Reduction |

### System memory

| Memory type                           | Amount(Access speed)                                       | Data bus width |
|---------------------------------------|--|----------------|
| EDO RAM                               | 8 MB (70 nanoseconds)                                      | 64-bit         |
| Maximum memory<br>expansion (all EDO) | 40 MB (70 nanoseconds)                                     | 64-bit         |
| BIOS Flash EPROM                      | 128 KB (150 nanoseconds)                                   | 8-bit          |
| Video RAM                             | 1 MB (60 nanoseconds)                                      | 32-bit         |
| Cache memory                          | 16 KB on CPU chip<br>(8 KB instructions + 8 KB write-back) | 64-bit         |

### Memory technology

|                        |                                  |
|------------------------|----------------------------------|
| Technology             | 3.3-volt                         |
| No. of expansion slots | 1                                |
| Expansion module sizes | 8 MB, 16 MB, 32 MB (all EDO RAM) |

### Memory map

| Address                               | Size | Usage                    |
|---------------------------------------|------|--------------------------|
| 00000000 - 0009FFFF                   | 640  | System woking memory     |
| 000A0000 - 000BFFFF                   | 128  | Video RAM area           |
| 000E0000 - 000EFFFF                   | 64   | Video BIOS (RAM shadow)  |
| 000F0000 - 000FFFFF                   | 64   | System BIOS (RAM shadow) |
| 00100000 - rest of memory up to 40 MB |      | System extended memory   |
| FFFE0000 - FFFEFFFF                   | 64   | SM-RAM in SM mode        |
| 0F0000 - 0FFFFF                       | 64   | System BIOS ROM          |

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**Diskette drive**

| <b>Specification</b> | <b>High setting</b> | <b>Low setting</b>  |
|----------------------|---------------------|---------------------|
| Media supported      | 3.5 inch 2HD        | 3.5 inch 2DD        |
| Storage capacity     | 1.44 MB             | 720 KB              |
| Rotation             | 300 rpm             | 300 rpm             |
| Transfer rate        | 500 Kbit per second | 250 Kbit per second |
| Bytes per sector     | 512                 | 512                 |
| Sectors per track    | 18                  | 9                   |

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**Hard disk drive**

|                             |  |
|-----------------------------|--|
| Formatted capacity          | 520 million bytes (500 MB)             |
| Data transfer rate to media | < 44.9 Mbits/sec                       |
| Average seek time           | 13 ms typical                          |
| Track-to-track seek time    | 3 ms typical                           |
| Drive rotation              | 4,200 rpm                              |
| No. of disks                | 2                                      |
| No. of read/write heads     | 16                                     |
| Coding                      | 8-9 RLL                                |
| Bytes per sector            | 512                                    |
| Interleave                  | 1:1                                    |
| Interface                   | Enhanced IDE (AT compatible task file) |

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**Screen**

|                               |                             |
|-------------------------------|-----------------------------|
| Screen type                   | Advanced STN colour         |
| Number of dots                | 640 x 480                   |
| Dot pitch                     | 0.33 mm (H) x 0.33 mm (V)   |
| Display area                  | 217.2 mm (H) x 164.4 mm (V) |
| Diagonal                      | 10.4 inch                   |
| Contrast ratio                | 20:1 (typical)              |
| Colours                       | up to 256                   |
| Response rise/fall            | 250 ms / 120 ms             |
| LCD brightness in AC op.      | 85 NIT                      |
| LCD brightness in battery op. | 50 NIT                      |

| <b>Graphics adaptor</b> | <b>Video display</b>  | <b>Resolution</b> | <b>Max. refresh rate</b> | <b>Max. no. of colours</b> |
|-------------------------|-----------------------|-------------------|--------------------------|----------------------------|
|                         | Internal display VGA  | 640 x 480         | 70 Hz                    | 16 colours                 |
|                         | Internal display SVGA | 640 x 480         | 75 Hz (222 K col.)       | up to 256 colours          |
|                         | External SVGA         | 640 x 480         | 75 Hz (256 K col.)       | up to 16.7 mill. colours   |
|                         | External SVGA         | 800 x 600         | 75 Hz (256 K col.)       | up to 64 K colours         |
|                         | External SVGA         | 1024 x 768        | 75 Hz (256 K col.)       | up to 256 colours          |

| <b>Physical dimensions</b> | <b>Weight</b> | <b>Size (W, L, H)</b> | <b>Size (Inches)</b>  |
|----------------------------|---------------|-----------------------|-----------------------|
|                            | 3.2 kg        | 299 x 230 x 55 mm     | (11.7" x 9.0" x 2.1") |

| <b>Battery types</b> | <b>Main</b>      | <b>Back-up</b>   | <b>RTC</b>       |
|----------------------|------------------|------------------|------------------|
|                      | NiH <sub>2</sub> | NiH <sub>2</sub> | NiH <sub>2</sub> |
|                      | 12 V x 2.600 mAH | 7.2 V x 110 mAH  | 3.6 V x 30 mAH   |

| <b>Resume battery back-up</b> | <b>Main</b>         | <b>Back-up</b> | <b>RTC</b> |
|-------------------------------|---------------------|----------------|------------|
|                               | 4 -5 days (typical) | 4 hours        | 1 month    |

|                     |              |                                       |
|---------------------|--------------|---------------------------------------|
| <b>Battery life</b> | Maximum life | 4.0 hrs. (PC Magazine's Rundown V2.0) |
|---------------------|--------------|---------------------------------------|

|                              |                   |                                |
|------------------------------|-------------------|--------------------------------|
| <b>Integrated AC adaptor</b> | Input voltage     | 100 - 240 V AC, self-adjusting |
|                              | Frequency         | 50 - 60 Hz                     |
|                              | Output voltage    | 18 V                           |
|                              | Output current    | 1.7 A                          |
|                              | Power dissipation | 30 W                           |
|                              | Weight            | 340 g                          |

**Connectivity & expansion**

| PC ports               | Card Station ports           | Expansion  |
|------------------------|------------------------------|--|
| Serial                 | Serial                       | PC: 1 PC Card slot (PCMCIA 2.0) for 2 Type II cards or 1 Type III card |
| Parallel (ECP)         | Parallel (ECP)               | PC: Internal memory module slot  |
| (S)VGA monitor         | (S)VGA monitor               | Card Station: 2 Type III PC Card slots (PCMCIA 2.0)                    |
| Card Station connector | Notebook connector           |  |
| PS/2 Mouse/Keyboard    | PS/2 mouse and PS/2 keyboard |  |

**Bundled software**

Either Microsoft Windows® 95 or MS-DOS 6.22 & MS Windows for Workgroups 3.11 can be selected. By choosing one operating system, the other will be deleted from the computer.

If you select Microsoft Windows®95

- Microsoft Windows® 95
- Toshiba utilities and drivers for Microsoft Windows®95
- Hypertext on-line manual (Satellite 100CS User's Manual)
- Hypertext on-line help (Microsoft Windows®95)

If you select MS-DOS & MS Windows for Workgroups:

- MS-DOS and MS Windows for Workgroups
- Toshiba utilities and drivers for MS Windows for Workgroups
- PC Card and Socket services
- Hypertext on-line manual (Satellite 100CS User's Manual)
- Hypertext on-line manual (MS Windows for Workgroups)
- Hypertext on-line help (User's Guide for MS Windows for Workgroups)

**Environmental conditions**

|                                     | Operating                                   | Non-operating                            |
|-------------------------------------|---|--|
| Temperature                         | 5° C to 35° C                               | -20° C to 65° C                          |
| Thermal Gradient                    | 20° C/hour                                  | 20° C/hour                               |
| Relative Humidity                   | 20% to 80%<br>non-condensing                | 10% to 90%<br>non-condensing             |
| Altitude<br>(relative to sea level) | -60 to 3,000 m *<br>(-200 to 10,000 feet) * | -60 to 10,000 m<br>(-200 to 30,000 feet) |
| Shock                               | 10 G  | 60 G                                     |
| Vibration                           | 0.5 G                                       | 1 G                                      |

\* Aeroplane cabin pressures simulate low altitudes, so flying higher causes no restrictions.

**Certification**

|             |     |
|-------------|-----|
| UL 478/1012 | USA |
|-------------|-----|

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|                          |                |
|--------------------------|----------------|
| IEC 950                  | Europe         |
| NEMKO                    | Norway         |
| NEI                      | Norway         |
| DEMKO                    | Denmark        |
| SEMKO                    | Sweden         |
| SEV                      | Switzerland    |
| FIMKO                    | Finland        |
| VDE 0878 level B         | Germany/ EC    |
| VDE 0875 level B         | Germany        |
| FCC part 15 class B      | USA            |
| CSA 950/223              | Canada         |
| I. Canada                | Canada         |
| SASO                     | Middle East    |
| GOST                     | Russia         |
| CISPR Pub. 22 (EN 55022) | Europe/CE Mark |

# Satellite 100CS

## Features & Benefits



|                            | <b>FEATURE</b>  | <b>BENEFIT</b>  |
|----------------------------|---|---|
| <b>Microprocessor</b>      | <ul style="list-style-type: none"> <li>• Intel Pentium 75 MHz</li> <li>• Integrated numeric co-processor</li> <li>• 16 KB integrated cache</li> <li>• 2.9-volt core technology</li> </ul> | <ul style="list-style-type: none"> <li>• Provides a high speed, 64-bit external bus to cope with the most advanced software applications and GUIs</li> <li>• Faster processing of maths-intensive applications</li> <li>• Speeds up transfer of data between CPU and memory</li> <li>• Reduces the amount of power consumed and heat generated</li> </ul>   |
| <b>Memory</b>              | <ul style="list-style-type: none"> <li>• Standard 8 MB EDO RAM</li> <li>• 128 KB Flash EPROM</li> <li>• Shadow ROM</li> <li>• 8 MB, 16 MB, or 32 MB memory modules (optional)</li> </ul>  | <ul style="list-style-type: none"> <li>• 8 MB is the necessary amount of RAM to run powerful, memory intensive software and operating systems at a comfortable speed</li> <li>• Flash EPROM allows users to quickly update BIOS if necessary without returning machine to supplier</li> <li>• Enhances computer performance</li> <li>• Faster manipulation of software and data stored in memory</li> <li>• User can upgrade memory when the need arises</li> </ul> |
| <b>Internal FDD drive</b>  | <ul style="list-style-type: none"> <li>• 3.5" diskette drive</li> </ul>   | <ul style="list-style-type: none"> <li>• Reads from and writes to 3.5" 720 KB and 1.44 MB diskettes</li> </ul>  |
| <b>Hard disk drive</b>     | <ul style="list-style-type: none"> <li>• 520 million byte hard disk drive</li> <li>• ≤ 13 ms average access time and 1:1 interleave</li> <li>• Low-power consumption modes</li> </ul>     | <ul style="list-style-type: none"> <li>• Provides large storage capacity for multiple programs and data</li> <li>• Fast access to programs and data stored on hard disk</li> <li>• Maximise battery operating life</li> </ul>   |
| <b>Display</b>             | <ul style="list-style-type: none"> <li>• Advanced STN colour screen</li> <li>• 26.4 cm (10.4")</li> <li>• Adjustable viewing angle</li> </ul>   | <ul style="list-style-type: none"> <li>• Fast screen build due to dual scan technology</li> <li>• Comfortable working size</li> <li>• Excellent for presentation graphics and all Windows-based applications</li> <li>• Provides greater viewing comfort</li> </ul>   |
|                            | <b>FEATURE</b>  | <b>BENEFIT</b>  |
| <b>Graphics sub-system</b> | <ul style="list-style-type: none"> <li>• Very fast video controller</li> </ul>  | <ul style="list-style-type: none"> <li>• Excellent for smoother viewing of presentations or for work with design or DTP programs in the office</li> </ul>   |

|                         |  |  |
|-------------------------|--|--|
|                         | <ul style="list-style-type: none"> <li>• Graphics adaptor</li> <li>• Local-bus video</li> <li>• Video graphics accelerator</li> <li>• Dual display mode</li> </ul>                                       | <ul style="list-style-type: none"> <li>• 256 colours at up to 640 x 480 dot resolution internally and up to 16.7 million colours externally</li> <li>• Speeds up the transfer of data to screen creating faster images and clearer video</li> <li>• Ensures that graphics are generated quickly on screens to take advantage of Graphical User Interfaces such as Windows</li> <li>• Allows user to show data and presentations to colleagues or customers while controlling the procedure from internal screen and keyboard.</li> </ul>   |
| <b>Keyboard</b>         | <ul style="list-style-type: none"> <li>• Full-function keyboard</li> <li>• 8 cursor keys</li> <li>• 12 function keys and embedded keypad</li> <li>• 8 hot keys</li> <li>• Palm-rest for hands</li> </ul> | <ul style="list-style-type: none"> <li>• 3 mm travel ensures faster, more comfortable data entry</li> <li>• Allow fast, convenient cursor positioning</li> <li>• Provide desktop keyboard functionality and greater productivity</li> <li>• Allow users to change set-up features and use HotLock security direct from the keyboard</li> <li>• Allows easy comfortable typing, even where there is no flat surface</li> </ul>  |
| <b>Pointing device</b>  | <ul style="list-style-type: none"> <li>• Integrated MousePoint pointing device with buttons built into palm-rest</li> </ul>  | <ul style="list-style-type: none"> <li>• Easy to use</li> <li>• Precise control of cursor</li> <li>• No protruding extras when travelling</li> </ul>   |
| <b>Interfaces</b>       | <ul style="list-style-type: none"> <li>• SVGA colour monitor port</li> <li>• Parallel (ECP) port</li> <li>• Serial port</li> <li>• PS/2 keyboard/mouse port</li> </ul>                                   | <ul style="list-style-type: none"> <li>• Provides high-resolution (up to 1,024 x 768 dots) display of colour and graphics on external monitor</li> <li>• Allows use of peripheral devices accepting parallel signals</li> <li>• Permits easy data exchange with external storage devices</li> <li>• Permits easy and rapid data exchange with external devices, (e.g. printer, network)</li> <li>• A serial mouse can be attached to the serial port if the PS/2 port is occupied by an external keyboard</li> <li>• Allows transmission of files between many types of devices incl. PCs, printers, PDAs, modems, telephones</li> <li>• Provides full keyboard versatility</li> </ul> |
|                         | <b>FEATURE</b>   | <b>BENEFIT</b>   |
| <b>Interfaces cont.</b> | <ul style="list-style-type: none"> <li>• PS/2 keyboard/mouse port cont.</li> </ul>   | <ul style="list-style-type: none"> <li>• Allows faster, more accurate entry of numerical data via an external keyboard</li> <li>• Allows use of 102-key keyboard when desired; increases productivity of operators familiar with 102-key keyboard</li> </ul>   |

|                                 |   |   |
|---------------------------------|---|---|
|                                 | <ul style="list-style-type: none"> <li>• Card Station connector</li> </ul>  | <ul style="list-style-type: none"> <li>• Allows use of desktop pointing devices such as a mouse with graphics and presentation software</li> <li>• Frees serial port for use by another device</li> <li>• Increased productivity of operators familiar with using a mouse</li> <li>• Provides an instant connection to all ports hooked up to base and the additional PC Card slots</li> </ul>  |
| <b>Expansion slots</b>          | <ul style="list-style-type: none"> <li>• 2 Type II or 1 Type III PC Card slots (PCMCIA 2.0)</li> </ul>  | <ul style="list-style-type: none"> <li>• Provides mobile communication and expansion in a credit -card-sized format</li> <li>• Can be used for a wide range of communication and expansion modules such as modems, network adaptors, flash memory cards and removable hard disks</li> <li>• Extra 2 Type III PCMCIA 2.0 slot via Card Station</li> </ul>  |
| <b>Design</b>                   | <ul style="list-style-type: none"> <li>• A4 notebook design</li> <li>• Rugged ABS casing</li> </ul>   | <ul style="list-style-type: none"> <li>• Provides the speed, power and expandability of a high performance desktop in a lightweight, go-anywhere form</li> <li>• Tough enough to take the knocks of life on the road</li> <li>• Colour is integrated into material so casing doesn't require painting and there is no danger of paint peeling or scratching</li> </ul>  |
| <b>Power system</b>             | <ul style="list-style-type: none"> <li>• Lightweight removable, re-chargeable NiH<sub>2</sub> battery packs</li> <li>• Toshiba MaxTime Power Management (MTPM)</li> <li>• Advanced Power Management (APM)</li> <li>• Integrated AC adaptor</li> <li>• Intelligent power supply with battery "gas gauge," invoked through pop-up menu</li> </ul> | <ul style="list-style-type: none"> <li>• Environmentally friendlier to dispose of than nickel cadmium</li> <li>• Offers long battery life</li> <li>• Allows user to specify when power-hungry components should be shut down to make most efficient use of available battery power</li> <li>• Determines power needs by communicating with APM compatible software and passing on information to MTPM</li> <li>• Reduces overall travel weight</li> <li>• No cumbersome parts to carry</li> <li>• Electrical access world-wide</li> <li>• Provides easy access for monitoring battery life</li> </ul> |
|                                 | <b>FEATURE</b>  | <b>BENEFIT</b>  |
| <b>Power system cont.</b>       | <ul style="list-style-type: none"> <li>• System reset button</li> </ul>   | <ul style="list-style-type: none"> <li>• Allows rebooting without cycling power and without keyboard use (functions even when keyboard is closed)</li> </ul>  |
| <b>Multiple security system</b> | <ul style="list-style-type: none"> <li>• System password security</li> </ul>  | <ul style="list-style-type: none"> <li>• Stops unauthorised access to data and software when power is switched on</li> </ul>  |



|                         |  |   |
|-------------------------|--|---|
|                         | <ul style="list-style-type: none"> <li>• HotLock security</li> <li>• Kensington MicroSaver provision</li> </ul>  | <ul style="list-style-type: none"> <li>• Instant security with a screen blank and keyboard/mouse lock-out using the F1 hot key</li> <li>• Hardware-based theft prevention. The computer can be physically secured to an immovable object.</li> </ul>  |
| <b>Special features</b> | <ul style="list-style-type: none"> <li>• Flash EPROM</li> <li>• Plug and Play BIOS</li> <li>• AutoResume with AutoSave</li> <li>• Pop-up menu</li> <li>• Hot keys</li> <li>• LED icon bar</li> </ul>   | <ul style="list-style-type: none"> <li>• Allows end user to easily update BIOS if needed</li> <li>• Ready for Windows® 95</li> <li>• Allows you to turn the notebook off without exiting from software application; powers-up where you left off. AutoSave provides security against possible data loss due to loss of battery power.</li> <li>• Lets you change the configuration options and monitor the battery power level</li> <li>• Allow users to change various system configuration options any time, at the press of a key</li> <li>• Users can see the status of the machine even with lid closed</li> </ul>                                 |
| <b>Toshiba support</b>  | <ul style="list-style-type: none"> <li>• 1-year International Warranty</li> <li>• Optional additional 2-year International Warranty</li> </ul>   | <ul style="list-style-type: none"> <li>• Provides confidence that the notebook will give lasting, reliable performance</li> </ul>   |
| <b>Options</b>          | <ul style="list-style-type: none"> <li>• Carrying case with shoulder strap</li> <li>• High-speed PC Card modem (PCMCIA 2.0)</li> <li>• 8 MB, 16 MB and 32 MB EDO memory modules</li> <li>• Extra battery pack</li> <li>• Quick battery charger</li> <li>• Key caps for European languages</li> </ul> | <ul style="list-style-type: none"> <li>• Provides convenient space for computer, manuals, diskettes, file folders and other personal belongings</li> <li>• Provides easy access to information world-wide</li> <li>• Convenient, easy-to-install memory expansion for memory-intensive software applications</li> <li>• EDO memory expansion kits are readily available</li> <li>• Increases battery life while on the road</li> <li>• One battery can be charged using the quick battery charger while the other is in use to extend overall operating time</li> <li>• Users in virtually all countries work with most familiar set of keys</li> </ul> |

|                      | <b>FEATURE</b>   | <b>BENEFIT</b>   |
|----------------------|--|--|
| <b>Options cont.</b> | <ul style="list-style-type: none"> <li>• Card Station</li> </ul> | <ul style="list-style-type: none"> <li>• Connects to the back of the Satellite 100CS, providing Plug-and-Play connectivity and PC Card expansion</li> <li>• Allows customers to leave everything connected in the office, and reconnection in one easy clip-on movement</li> </ul> |

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- PCMCIA Ethernet adaptor

- Locks into place with special hooks: very stable
- Includes a complete row of port options: PS/2 mouse, PS/2 keyboard, RGB, serial, parallel
- Two separate Type III slots
- Let you connect all your computers to one network

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# Satellite 100CS

## Options



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| <b>Article</b>                    | <b>PA Number</b> |
|-----------------------------------|------------------|
| 8 MB memory kit                   | PA2031U          |
| 16 MB memory kit                  | PA2032U          |
| 32 MB memory kit                  | PA2034U          |
| Keycaps for German keyboard       | PA2213GR         |
| Keycaps for French keyboard       | PA2213FR         |
| Keycaps for Scandinavian keyboard | PA2213SC         |
| Keycaps for Swiss keyboard        | PA2213SL         |
| Keycaps for Italian keyboard      | PA2213IT         |
| Keycaps for Spanish keyboard      | PA2213SP         |
| Keycaps for English keyboard      | PA2213EN         |
| NiH <sub>2</sub> battery pack     | PA2437UY         |
| Battery charger                   | PA2436UY         |
| Carrying case                     | 2713372PHI       |
| Card Station                      | PA2711UX         |
| PCMCIA Ethernet adaptor           | PCE2-10BC        |