



Industrial Automation - Products & Configurations

| HT3000-TFM/S0 BASIC SYSTEM | | POWER [W] |
|----------------------------|--|-----------|
| Basic Configuration | LCD TFT 15,6" • Touch-Screen Multitouch • Intel® Celeron™ dual core 1047UE 1,40 GHz • 2GB RAM • Aluminum and glass TrueFlat front panel • fanless • VGA video output for additional external monitor • isolated 24V DC power supply • 2 MiniPCI slots • 12 months warranty | 50 |

| HT3000-TFM/S1 BASIC SYSTEM | | POWER [W] |
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| | S0 | S1 | | POWER [W] |
|-------------------------|----|----|--|-----------|
| PROCESSOR | • | • | Intel® Celeron™ dual core 1047UE • 1,40 GHz • 2MB smart cache • 2 cores, 2 threads • Soldered on-board | |
| | • | • | Intel® Celeron™ dual core 1020E • 2,20 GHz • 2MB smart cache • 2 cores, 2 threads • Soldered on-board | + 24 |
| | • | • | Intel® Core™ i3-3120ME • 2,40 GHz • 3MB smart cache • 2 cores, 4 threads • Soldered on-board | + 24 |
| | • | • | Intel® Core™ i5-3610ME • 2,70 GHz • 3MB smart cache • 2 cores, 4 threads • Soldered on-board | + 33 |
| | • | • | Intel® Core™ i7-3612QE • 2,10 GHz • 6MB smart cache • 4 cores, 8 threads • Soldered on-board | + 37 |
| DISPLAY & TOUCH-SCREEN | • | • | 15,6" W LCD TFT 16:9 • 1366x768 (HD), 16M colors • LED backlight, 400 cd/m2 • Viewing angle L:R/U:L (typ): 85°:85°/80°:80° 15,6" W Touch-Screen • P-CAP projected capacitive multitouch, 4 fingers • Controller on module | |
| | • | • | 18,5" W LCD TFT 16:9 • 1366x768 (HD), 16M colors • LED backlight, 300 cd/m2 • Viewing angle L:R/U:L (typ): 75°:75°/70°:70° 18,5" W Touch-Screen • P-CAP projected capacitive multitouch, 4 fingers • Controller on module | + 10 |
| | • | • | 21,5" W LCD TFT 16:9 • 1920x1080 (FHD), 16M colors • backlight LED, 300 cd/m2 • Viewing angle L+R/U+L (typ): 89°:89°/89°:89° 21,5" W Touch-Screen • P-CAP projected capacitive multitouch, 4 fingers • Controller on module | + 21 |
| | • | • | | |
| RAM MEMORY | • | • | 2 GB • 1 module SODIMM DDR3-1600 | |
| | • | • | 4 GB • 1 module SODIMM DDR3-1600 | + 1 |
| | • | • | 8 GB • 1 module SODIMM DDR3-1600 | + 2 |
| | • | • | 16 GB • 2 x 8 GB modules SODIMM DDR3-1600 | + 4 |
| INTERNAL PSU | • | • | Without UPS (uninterruptible power supply) | |
| | • | • | With UPS (uninterruptible power supply) • integrated in power supply section • batteries kit not included > note 1 | + 1 |
| EXTERNAL MONITOR OUTPUT | • | • | VGA (DB15F) video interface for additional external monitor • Max resolution 2048x1536 SXGA | |
| | • | • | DVI-I (Dual Link) video interface for additional external monitor • Max resolution 2048x1536 SXGA | + 0 |
| EXPANSION SLOTS | • | • | No expansion slots | |
| | • | • | 1 x PCI half size • on riser card • expansion board with max consumption 3W | |
| | • | • | 1 x PCIe 4x format (Generation 2) half size • on riser card • expansion board with max consumption 3W | + 0 |

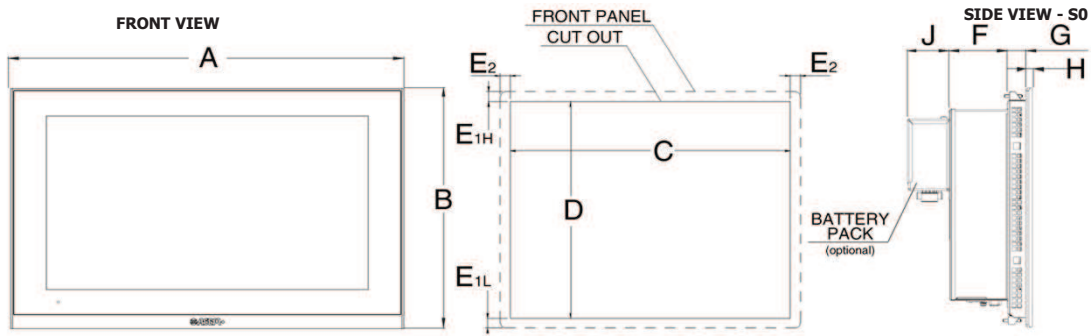
| OPTIONS | | | | POWER [W] |
|---------------------|---|---|---|-----------|
| TPM | • | • | TPM (Trusted Platform Module) | 0 |
| SSD mSATA | • | • | SSD mSATA (U110/X110), SATA 3, 6Gb/s (Solid State Disk), MLC | 2 |
| SSD 2,5" | • | • | SSD 2,5" SATA installation kit (SSD not included) | - |
| | • | • | SSD 2,5" UJ/X110 SATA 3, 6Gb/s (Solid State Disk), MLC | 5 |
| HDD 2,5" | • | • | HDD 2,5" SATA installation kit (HDD not included) • with shock absorber | - |
| | • | • | HDD 2,5" SATA | 6 |
| CFAST | • | • | CFAST SATA | 1 |
| COMMUNICATION PORTS | • | • | 1 x RS232/422/485 serial port (DB15M) • 1 x USB 2.0 port > note 2 | 1 |
| | • | • | 1 x RS232/422/485 optoisolated serial port (DB15M) • 1 x USB 2.0 port > note 2 | 1 |
| | • | • | 2 x RS232 serial ports (DB9M) > note 2 | 2 |
| | • | • | 2 x USB 2.0 ports > note 2 | 0 |
| | • | • | 1 x Ethernet 10/100/1000Mbps, Intel® 82574L > note 2 | 1 |
| | • | • | Unmanaged Ethernet switch 4 x 10/100/1000Mbps > note 2 | 4 |
| POWER SUPPLY | • | • | Kit for ATX mode power supply functionality including on board button, internal cable and connector for remote command. | 0 |
| UPS BATTERIES KIT | • | • | Batteries kit for rear systems mounting • cable included | 15 |
| | • | • | Batteries kit for detached mounting (wall mount) • 100cm cable included | 15 |
| FIELDBUS | • | • | NETcore® X MiniPCI fieldbus module • For technical details and supported drivers see related page > note 3 | 3 |
| WARRANTY EXTENSION | • | • | Warranty extension to 18 months on basic system and its variants | |
| | • | • | Warranty extension to 24 months on basic system and its variants | |
| | • | • | Warranty extension to 36 months on basic system and its variants | |

| NOTES | |
|-------|---|
| 1: | For power consumption calculation we recommend to read the tips on pg. 4. The power values does not include the absorbed power of USB devices connected to the ports. |
| 2: | UPS functionalities are ensured with Microsoft Win32/64bits operating systems only |
| 3: | Communication ports cannot be installed together |
| 3: | Boards with MiniPCI / MiniAPCI bus cannot be installed together. For technical details and supported drivers see pg.212 or pg.217 |



| TECHNICAL SPECIFICATIONS | | |
|-------------------------------|--|---|
| Case | Panel mount | |
| Overall dimensions & weight | See details on the related section | |
| Front panel | Aluminum and tempered glass TrueFlat • ASEM logo serigraph printed | |
| Touchscreen | Projective capacitive multitouch, 4 fingers • overlaminated with OCA (Optical Clear Adhesive) • Controller on module | |
| Frontal protection | IP66 | |
| Power supply | Isolated • Input voltage: 18÷32V DC • ATX mode push button (optional) | |
| UPS (optional) | 12V DC UPS (Uninterruptible Power Supply) battery backup system Batteries module (optional): Pb, 12V/13A max, 2500mA/h • Charge time 3h@25°C • Discharge time 5'@ 10A and 25°C • Lifetime 10years@25°C | |
| Motherboard | Type | "All-In-One" ASEM 1151 |
| | Watch dog | Time programmable |
| Intel platform | Processor | Intel® Celeron™ dual core 17/35W • Intel® Ivy Bridge™ third generation 35W |
| | Chipset | Intel® HM76 Express Chipset |
| Operating System | O.S. certified by ASEM | Microsoft Windows 8.1 Industry Pro 32/64bit • Windows 7 Pro/Ultimate 32/64bit • Windows XP Pro 32bit • Windows Embedded Standard 7P 32/64 bit • Windows Embedded Standard 2009 (XPe SP3) 32bit Other operating systems, such as Linux, VxWorks, QNX, etc., have not been certified by ASEM but they are reasonably supported by the Intel platform after verification of compatibility |
| | O.S. not supported by Intel platform | Microsoft Windows 2000 / 98 / NT • Microsoft Windows CE 5 / 6 |
| Video controller | Intel® HD Graphics integrated in Intel® Celeron™ microprocessor • 650MHz • LVDS 8bit/color digital interface Intel® HD Graphics 4000 integrated in Intel® Core™ microprocessor • 650MHz • LVDS 8bit/color digital interface | |
| Video RAM (shared) | Dynamic Video Memory Technology • Memory quantity is automatically selected by operating system | |
| System memory | DDR3-1600 type • 2 SODIMM modules • min 2GB • max 16GB | |
| Mass storage interfaces | 1 x SATA 3, 6Gb/s • 1 x mSATA 2, 3Gb/s • integrated on board | |
| TPM | 2x10 (2,54) pin-strip connector for optional TPM module | |
| CFast slot | 1 x slot CFast (bootable) external access | |
| Bus expansions slots | on board (S0, S1) | 2 x MiniPCI |
| | on riser card (S1) | 1 x PCI or 4x PCIe x1 • half size boards with 3W max consumption • alternative to each other |
| Rear access interfaces | 3 x Ethernet 10/100/1000 Mbps (RJ45 - 2 x Intel® 82574L, 1 x Intel® 82579LM) • 2 x USB 3.0 (Type A) • 2 x USB 2.0 (Type A) • 1 x PS/2 K/M • VGA or DVI-I output video (2048x1536 SXGA max resolution) | |
| Rear access serial interfaces | 1 x RS-232 (DB9M) | |
| Environmental specifications | Operating temperature: 0° ÷ +50°C, 0°C ÷ +45°C with 24x7 HDD, +5°C ÷ +45°C with standard HDD • Storage temperature: -20° ÷ +60°C • Humidity: 80% (non-condensing) | |
| Approvals | CE (EN 55022, EN 61000-3-2/3, EN 55024, EN 60950-1) • cULus LISTED (UL508) | |
| Standard warranty | 12 months • Warranty management by ASEM headquarters | |

DIMENSIONS (mm)



| LCD TFT | A | B | C | D | E _{1L} ·E _{1H} /E ₂ | F (S0/S1) | G | H | J | Weight (kg) |
|---------|-------|-------|-----|-----|--|-----------|----|---|------|-------------|
| 15,6" | 433 | 280,5 | 410 | 255 | 15:10,5/11,5 | 70/100 | 36 | 6 | 41,8 | tbd |
| 18,5" | 503 | 320,5 | 480 | 300 | 10:10,5/11,5 | 70/100 | 35 | 6 | 41,8 | tbd |
| 21,5" | 581,5 | 367,5 | 559 | 347 | 10:10,5/11,5 | 70/100 | 35 | 8 | 41,8 | tbd |

NOTE: for systems with Celeron 1047UE processor the dimension F is 60mm (S0) or 90mm (S1)

CONNECTORS VIEW

