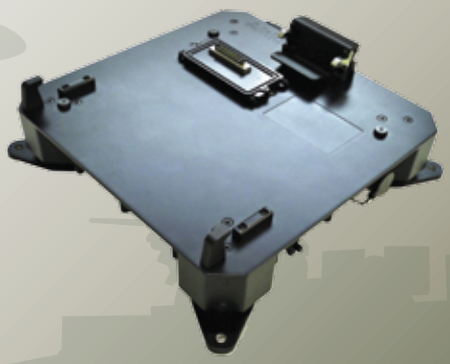
TBDocK™-19 ToughBook Docking Station

The InTalTech **TBDocK™-19** Military Docking Station for the Panasonic CF-19 **ToughBook** computer is designed from the ground up for use in military rugged applications. Providing long-term durability, toughness and safety customers expect. The **TBDocK™** presents a revolutionary **DropN'Lock** mechanism; once your **ToughBook** is "dropped" you can be sure it is locked and fully functional while using it under the harshest environmental conditions.
The product is designed for airborne, naval and ground applications,
While providing high levels of performance and reliability in the harshest environments.

Product Highlights

- Military docking station for Panasonic **CF-19** computer
- Docking station doesn't block any **CF-19** interfaces
- Revolutionary **DropN'Lock** mechanism for Guided Placement & Locking Reinforcement system
- Constant connectivity is maintained with a protected, guided, floating dock mechanism
- Hidden and protected connectors on right/left sides
- Shock Absorbers system is designed to effectively dampen vibration and shock experienced in harsh environments
- High performance docking station complying with MIL-STD-810F, MIL-STD-461F, MIL-STD-1275B
- Sealed casing and connectors, complying with IP65
- Operating temperature range of -25 to 65°C

Flexible Mounting



- Installed as a laptop PC in horizontal/table orientation
- Installed as a tablet PC in vertical/wall mount orientation

Rugged Military Solution

- Compact, tough, corrosion proof Aluminum casing.
- Conductively cooled unit – no moving parts
- Olive drab epoxy painting per MIL-C-22750F
- Cover protects docking connector when computer is undocked
- Cover fastens to the rear when the computer is docked

Product Customization

- The product is open for customization, based on project volume

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Technical Specification

Product Details	
Description	Military docking station for Panasonic ToughBook CF-19
Docking Mechanism	Hooks inserted into computer notches with a reinforcement lock that doesn't enable computer release at shock/vibration
Docking Connectivity	Maintained with a floating connection mechanism that always ensures an exact alignment between TBDocK & computer
External Interfaces	Connectors located in Hidden & Protected bays on R/L sides
Installation	Installed both vertically (Tablet) or horizontally (Laptop)

Connectors	Military P/N	Para-Military P/N
Power Connector	MS3470W12-3PY	MS3470W12-3PY
Ethernet Connector	D38999/20WA35SN	Female RJ-45
VGA/USB/Serial Conn.	D38999/20WC35SN	DB15 connector
USB Connector	804-003-07NF6-4SB	Female USB A

Electrical	
Ethernet Interface One (1) port	Fast Ethernet 10BaseT/100BaseTX Fully compliant with IEEE 802.3/802.3u Full / Half duplex supported
USB Interface Four (4) ports	High Speed USB 2.0 up to 480 Mbps All ports are fully powered
VGA Interface One (1) port	Video Graphic Array interface 640x480 resolution
Serial Interface One (1) port	Serial comm. channel (Unbalanced /Balanced) User Can configure to RS232 or RS422 or RS485
Input Voltage Range	16 - 32 VDC
Input Nominal Voltage	24 VDC
Output Voltage	16 VDC @ 3.85 A (floating output)
Input Power Protect	Reverse Polarity Protection

Mechanical	
Weight	~3 Kg
Length	282.6 mm
Width	282.6 mm
Height	97.3 mm
Case Cooling	No moving parts, Passive Conductively cooled
Case Material	Corrosion proof Aluminum casing
Case Sealing	IP65 Dust, Oil and Water tight package sealing
Case Painting	Olive drab epoxy painting per MIL-C-22750F

Mating Connectors (Not supplied with the product)

Description	Military P/N	Para-Military P/N
Power Connector	MS3475W12-3SY	MS3475W12-3SY
Ethernet Connector	D38999/26WA35PN	Male RJ45 on cable*
VGA/USB/RS422 Conn.	D38999/26WC35PN	Std. VGA connector*
USB Connector	804-001-06NF6-4PB	Male USB A on cable*

(*) For ITT Rugged connection solutions see accessories data sheet

Ordering Information

Model	Description
TBDocK-19-XXX	Docking station for Panasonic CF-19
XXX interpretation	000 - Military 001 - Rugged Para Military version

Note1: **Preliminary Version**, specification subject to change without notice
Note2: Images are for illustration purposes only

EMC (Designed to Meet)

MIL-STD-461F	Description	Freq. Range
Method CE102	Conducted Emission, Power lines (army)	10 KHz - 10 MHz
Method CS101	Conducted Susceptibility, Power lines (curve #2)	30 Hz - 150 KHz
Method CS114	Conducted Susceptibility, Bulk cable Inj. (curve #4)	10 KHz - 30 MHz
Method CS115	Conducted Susceptibility, Bulk cab. Inj.+ Imp. Exc.	
Method CS116	Conducted Susceptibility, Damped Sin. Transients	10 KHz - 100 MHz
Method RE102	Radiated Emission, Electric field (army & navy)	2 MHz - 18 GHz
Method RS103	Radiated Susceptibility, Electric field	2 MHz - 18 GHz

MIL-STD-1275B	Description
Paragraph 5.1.2.1, 5.1.3.1, 5.2.1	Steady-state DC voltage
Paragraph 4.4	Polarity reversal
Paragraph 5.1.2.3, 5.1.3.3, 5.2.3, 5.4.2.4, figure 4, 6	Voltage surges
Paragraph 5.1.2.2, 5.1.3.2, 5.2.2, figure 2	Voltage ripple
Paragraph 5.1.2.4, 5.1.3.4, 5.2.4, 5.4.2.3, figure 5, 7	Spikes imported
Paragraph 5.4.2.2	Spikes exported
Paragraph 3.1.7, 5.1.3.5, figure 3	Starting disturbances test

Environmental (Designed to Meet)

MIL-STD-810F	Operating	Storage
Temperature Method 501.4&502.4 Proc. I & II	-25 to 65°C	-40 to 71°C
Temperature Shock Method 503.4, Proc. I		-40 to 71°C
Altitude Methode 500.4, Proc. I & II	15000 ft for 1h min.	40000 ft for1h min.
Solar Radiation Methode 505.4, Proc. I cat. A1	3 cycles of 24h on each angle	
Rain Methode 506.4, Proc. I	Rain rate 1.7lit/m□/min. Wind velocity 64km/h For 30 min.	
Humidity Method 507.4,	30°C to 60°C 85% to 95% rel. humidity 10 cycles of 24h	
Dust & Sand Method 510.4, Proc. I		
Salt Atmosphere Method 509.4,	2 Cycles of 48 hours	
Fungus Method 508.5,		
Vibration Method 514.5, Proc. I cat. 20	Tracked & wheeled vehicles	
Loose cargo Method 514.5, Proc. II Cat. 5	Test period - 3 hours	
Transit Drop Method 516.5 Proc. VI	Entire unit in the transit case Each face, 26 drops, from a height of 122 mm	
Functional shock Method 516.5 Proc. I	40g, 11msec. Saw tooth peak pulse	

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