

WS Aware®

The Safest Dual Workstation Monitor

www.credencetech.com

DSP-based monitor keeps track of operators, tool and bench grounding and EMI

Assurance of continuous good grounding is the cornerstone for an ESD-safe environment. Utilizing the latest advances in digital signal processing, WS Aware® provides continuous uninterrupted monitoring of all grounding parameters on a workbench or in a tool, in full compliance with ANSI 6.1 and ANSI/ESDA S.20.20 requirements, as well as high-frequency noise (EMI) on ground.

For operators, WS Aware® utilizes dual wrist straps for a continuous resistivity check of human body connection and patent-pending advanced DSP technology for reliable monitoring utilizing ultra-low control voltage. Each operator's body voltage is also continuously monitored.

For equipment, WS Aware® CTC061 provides continuous monitoring for two metal grounds (such as tools) and for two "soft" grounds (such as dissipative mats, surfaces and parts made of dissipative plastics), or four metal grounds (CTC062)

WS Aware® provides monitoring of EMI on metal grounds with programmable alarm thresholds. As electromagnetic interference (EMI) is rapidly becoming a significant factor in equipment failures, this patent-pending unique feature of WS Aware® will help assure proper operation of your equipment.



Applications

- Disk Drive Assembly
- GMR Head Handling
- Semiconductor Fabrication
- Reticle Handling
- Flat Panel Fabrication
- Laser Diodes/Fiberoptics
- Electronic Assembly
- Industrial Robotics
- Medical
- Military
- Wherever ESD is an Issue

Features

- Dual wrist strap monitor
- Big Brother™ operator detection
- Extremely low voltage on person
- Body voltage monitoring
- Metal ground monitoring
- EMI on metal ground
- Dissipative ground monitoring
- Programmable thresholds
- Industrial Network Interface
- Comprehensive information to FMS
- Miniature
- Individually Calibrated

Key Advantages

Highly Integrated

This miniature monitor with the footprint of a credit card, packs inside a combination of features that cannot be found in any monitor several times its size.

Assurance of Operator Grounding

WS Aware® utilizes patent-pending Big Brother™ terminals that detect the presence of an operator and raises an alarm if an operator is within reach of sensitive components but is not plugged in.

Ultra-Low Voltage

WS Aware® provides only 25 millivolts of signal to any part of the wrist strap at any time, even when it is open -- many times less than any comparable monitor. WS Aware® is completely safe to use in any environment utilizing the most sensitive components -- now or for years to come.

Safety

WS Aware® has built-in safety 1M resistors in ground path for each half of the wriststrap. This assures operator's safety and quick charge dissipation.

Workstation Monitor

Models CTC061
CTC062



Credence
Technologies

Big Brother® Terminals

Big Brother® operator's terminals provide assurance that the operator is always grounded by sensing operator's presence within reach of the workbench. If an operator is within reach of components but is not plugged in, WS Aware equipped with Big Brother™ terminals will raise an alarm. This patent-pending method prevents non-grounded operators from damaging sensitive parts.

As a true dual workstation monitor, WS Aware® uses two terminals for two operators' connection to allow their placement at different workbenches for convenience of operators. A visitor/supervisor jack is of the same type as for operators harmonizing the type of the wriststraps throughout the factory.

Specification

| Wrist strap Monitor | | Ground Monitor | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------------------------|------------------------------------------------------------|
| Wrist Strap Type | Dual, 3.5mm plug | Parameters Monitored | CTC061 |
| Connection to Ground | 1 MOhms for each side | Metal Ground (Tools) | 2 connections |
| Number of Wrist Straps | 2 | Dissipative Surfaces | 2 connections |
| Imposed Voltage on Body | 0.025V (25mV) max. | CTC062 | |
| Remote Terminals | 2, one for each operator | Metal Ground (Tools) | 4 connections |
| Remote Terminal Cables | Mini-DIN 6-pin | Ground Connector | No-Screw Terminal |
| Visitor Jack on Remote | Available | Connection Activation | Dip-Switch (no jumpers) |
| Body Resistance Alarm Level* | 10MOhms default | Metal Ground Alarm* | 10 Ohms default |
| Body Voltage Alarm Level* | +/-2.5V default | Dissipative Ground Alarm* | 1GOhms default |
| Local Indication | LED, Buzzer | Imposed Voltage | |
| Indicated Parameters | Availability Continuity Body Voltage | Metal Ground | < 0.075V open circuit |
| | | Dissipative Surfaces | < 0.4V open circuit |
| Output Parameters for Each Operator | Availability Continuity Body Voltage | EMI on Metal Ground Sensitivity* | 0dBm default |
| | | Local Indication | Good/Alarm/Off LED, Buzzer |
| | | Indicated Parameters | Resistance to Ground EMI on Metal Ground |
| | | Output Parameters for Each Connection | Availability Resistance to Ground EMI (Metal Ground) |
| * These parameters are programmable in field either locally or via facility monitoring system. Default values are used when no other specification is provided | | | |
| Connectivity | | General | |
| Interface | | Power (local or network) | |
| Current Loop | 4..20mA | Voltage | 12..24V DC |
| Logic Level | 0/20mA | Current Consumption | <150mA |
| MODBUS | MODBUS Std. Compliant | Dimension (approx.) | 3.2" x 2.25" x 1.30" 81mm x 57mm x 33mm |
| Data Connector | RJ45 jack | Weight (approx.) | 4.25 oz (120g) |

Replaceable Jacks Protect Your Investment

WS Aware® terminals utilize special jacks custom made for high reliability allowing for a long period between service.

Should jacks ever become damaged, replacement of them in WS Aware® terminals does not require replacement of the entire terminal. Patent-pending modular construction of WS Aware® terminals allows replacement of only an inexpensive internal board with the jacks using a simple screwdriver instead of buying the entire new terminal. This greatly simplifies maintenance and significantly reduces cost of ownership.



Ordering Information

The following is included when you order WS Aware:

| | |
|--------------------|------|
| WS Aware® CTC061/2 | 1ea. |
| Remote Terminal | 2ea. |
| 10' (3m) Cable | 2ea. |
| User's Guide | 1ea. |
| Grounding hardware | 1ea. |

Don't forget to order proper power adapter unless FMS or data acquisition system provides power to WS Aware®.

CTC-06X-YY-Z

| | |
|-----------------------------------|----|
| Model | |
| 2 metal and 2 dissipative grounds | 1 |
| 4 metal grounds | 2 |
| Terminals | |
| Regular | - |
| Big Brother™ | BB |
| Interface | |
| Current Loop 4..20mA | 3 |
| MODBUS | 5 |
| Logic Level (0..20mA) | RT |

| | |
|----------------------------------------------|------------------|
| AC/DC Power Adapter (U.S.) | CTA216 |
| AC/DC Power Adapter (Universal) | CTA217 |
| Ground Cord for Dissipative Surfaces (1 ea.) | AWD006 |
| Ground Cord for Metal Surfaces (2 ea.) | ATD018 |
| Replacement Terminal Board w/Jacks | CTA245 |
| Remote Terminal Cable (10' -- 3m) | NCA001 |
| Professional dual wriststrap w/10' (3m) cord | CTA472-10 |

Accessories



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Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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