

SmartCable™ USB & RS232 Gage Interfaces

The SmartCable™ line of single input gage interfaces converts the output of any manufacturers gage into USB

CONTROL YOUR SHOP FLOOR WITH

- SPC Software
- Gage Interfaces
- Genesis Roving Collectors
- Wireless Data Transfer

SmartCable FEATURES

It's portable just 1 ½" x 4 ¼" x 1"
USB Version: 1" x 2" x ½"

Output specifications...

USB-RS232 Output: 9600, 8, N, 1.
ASCII text string in three
formats—reading only,
full output or Mitutoyo

Example output data...

```
+1.004<CR><LF>  
001,+2.4321,NRM, 01<CR><LF>  
01A +1.2345<CR>
```

Continuous Output Mode

Host Commands

Upgradeable with Flash Utility

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www.spcanywhere.com



The SmartCable™ line of single input gage interfaces converts the output of any manufacturer's gage into standard RS232 or Mitutoyo output format for use in any SPC data collection system.

The SmartCable™ quickly configures itself. ASDQMS has made it easy to connect calipers, micrometers, indicators or any other gages directly to PCs or Mitutoyo compatible devices. Readings are triggered using the gage's send button, button on cable, an external foot switch (connected via external foot-switch jack) or host request. The SmartCable's interface is designed with the harsh shop-floor environment in mind and employs an advanced micro-controller.

The SmartCable™ adds functionality to virtually any existing gage by allowing data collection in either static mode (instantaneous reading) or dynamic mode (MIN/MAX/TIR). Requiring no external power supply, the SmartCable™ gets its power via the PC's USB serial port or Mitutoyo compatible systems, making it ideal for portable (roving) data collection (optional external power supply is available).

SmartCable™ easily connects devices to a PC via...

- USB 2.0
- Standard RS232 ASCII port
- Mitutoyo DP1, DP3, DP7 and Mux 10
- Mitutoyo Digimatic compatible devices

Special features...

- Simple plug and play set up—doesn't require software configuration
- Operating modes: Static (Normal) mode operation or Dynamic (MIN / MAX / TIR)
- Footswitch input, LED status light, host command operation and set up
- Low power (draws power from the PC or most Mitutoyo devices)
- LIFETIME WARRANTY



SERVICES AVAILABLE

Technical Support
Installation and Setup
Maintenance
Application Support
Hardware Support

SmartCable Models

- SmartCable USB Mitutoyo
- SmartCable USB CDI
- SmartCable USB Federal
Maxum Plus-III
- SmartCable USB Federal
uMaxum
- SmartCable USB Ono
Sokki

TURNKEY SOLUTIONS

ASDQMS provides customers with complete SPC solutions including installation, training and support. We help manufactures eliminate the high cost of inconsistent quality.

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PATENT PENDING

SmartCable™ Custom Applications

Mahr Federal Maxum to direct tool compensation SmartCable

A new and exciting application for a custom SmartCable™ was developed for a customer looking to use a Mahr Federal Maxum Indicator and an inexpensive interface to do direct tool compensation for CNC machines.

The standard Mahr Federal to RS-232 SmartCable™ provided the perfect base on which to develop a custom serial output for automatic feedback to directly compensate tool wear by taking data from the Maxum indicator, converting it to standard ACSII data, and incorporating that data into offset "G" codes that can be understood by the CNC machine.

The engineering time for the project took only three days, and the new SmartCable™ is in full automatic feedback mode without operator assistance.

Mitutoyo to Analog SmartCable™

A recent customer of ours made a request for a custom SmartCable™ that we never thought we would see. Their application required the use of a Mitutoyo Digimatic Scale on a material handling machine using a Fanuc controller with an analog input board. The custom SmartCable™ they ordered converted the Mitutoyo output of the scale from 0 Volt to 5 Volt analog signal for use with the controller's analog input board. The custom engineering took less than one week, and was then installed and working with the system in less than a day.

CDI (Chicago Dial Indicator) Logic Series to Relay Output SmartCable

A well known battery manufacturer requested a custom SmartCable™ to interface with their production line machines to monitor go/no-go conditions. Chicago Dial Indicator's Logic series indicator can be set up with high-low limits and outputs this information via RS-232. This customer asked us to design the SmartCable™ to monitor the RS-232 output for "out of specification" parts and trigger two relays, one for the high limit, the other for the low limit. The production line controller would take the relay output information and accept or reject the part appropriately. The SmartCable™ also passes the RS-232 data reading plus limit information to a PC for SPC data collection. The custom engineering took less than two days and was installed and working with the system within a few days.



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