

USYS 100 Universal Processor/Controller for ZUMBACH Diameter Gauges, single gauge application, two RS-ports

Now with complete SPC/SQC capability and Sigma Expert™ control system



USYS 100 is a HI-Tech, Industrial Diameter Data Acquisition System with a Human Touch.

The Universal USYS 100 features real-time, multi-tasking data processing and control. USYS accepts measurements from a broad line of ZUMBACH gauges covering a diameter or width range from 0.01 mm (.0004 in.) to 318 mm (12.5 in.) and above with selectable resolution to 0.0001 mm (.000005 in.).

HI-TECH

- Real-time, multi-tasking system
 - ◆ Measures, displays, monitors, controls, collects SPC data, prints reel-end reports (SQC) and communicates with a host computer: ALL AT THE SAME TIME - WITHOUT MISSING A BEAT!
- Computer networking / data security
 - ◆ USYS is equipped with two RS-232 ports ready for advanced factory networking including ZUMBACH PC-LINK. Ports are addressable and may be configured for RS-485. Multiple security levels prevent tampering.
- Permanent calibration
 - ◆ ODAC/USYS does not drift; no recalibration required.
- Sigma Expert™ Control system
 - ◆ Smart SPC enhanced closed-loop control optimizes product dimensions while CpK pilot option maximizes material savings.

INDUSTRIAL

- Rugged sealed control panel
 - ◆ Protects the electronics from dust, fumes and moisture.
- Real-time data collection
 - ◆ Every event (tolerance alarm, spark failure etc.) is registered and reported on the real-time and reel-end printouts.

HUMAN TOUCH

- Easy to use
 - ◆ Well structured intuitive menus, commands and prompts in 5 languages.
- 10 direct-access keys = speedy operation (4 keys are user programmable)
 - ◆ These keys provide quick access to functions like "controller on/off", "menu", "product table", etc.

STANDARD CONFIGURATIONS

USYS 100A-01B-A (EXTRUSION)

Monitoring, controlling with solid state regulating device (SRD) or increase/decrease opto-coupler outputs, event/data logging (LOG), and package summary (SOC) data acquisition and reporting

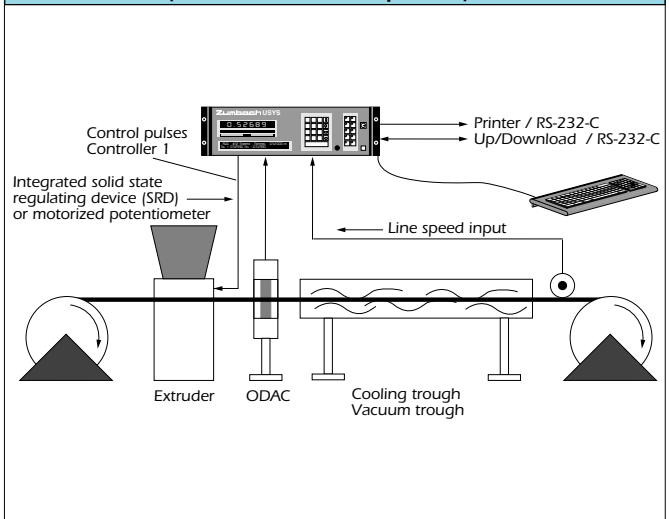
USYS 100A-01B-D (EXTRUSION with SPC)

Monitoring, controlling with solid state regulating device (SRD) or increase/decrease opto-coupler outputs, event/data logging (LOG), and package summary (SOC) data acquisition and reporting, and SPC data acquisition with real-time trend analysis

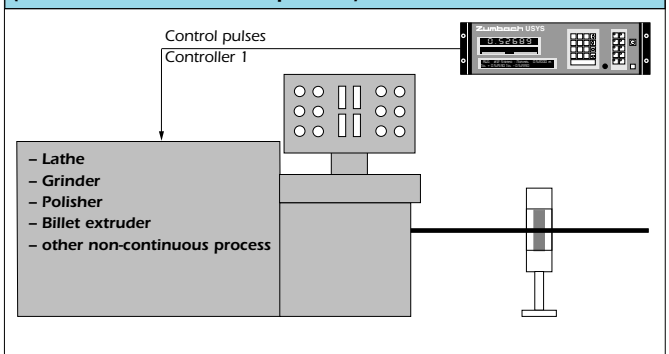
USYS 100A-01B-B (BAR/SHAFT)

Monitoring, controlling with increase/decrease relay outputs, event/data logging (LOG), and package summary (SOC) and comprehensive SPC data acquisition and reporting

Extrusion (or other continuous process)



Bar or shaft measurement (or other non-continuous process)



USYS 100 FRONT PANEL DISPLAYS AND OPERATING ELEMENTS

Frontpanel

Heavy-duty industrial-grade front panel.

LED display

Large 8-character digital display of product dimension.

LED bar graph

Bright 40-segment red bar display indicating product deviation.

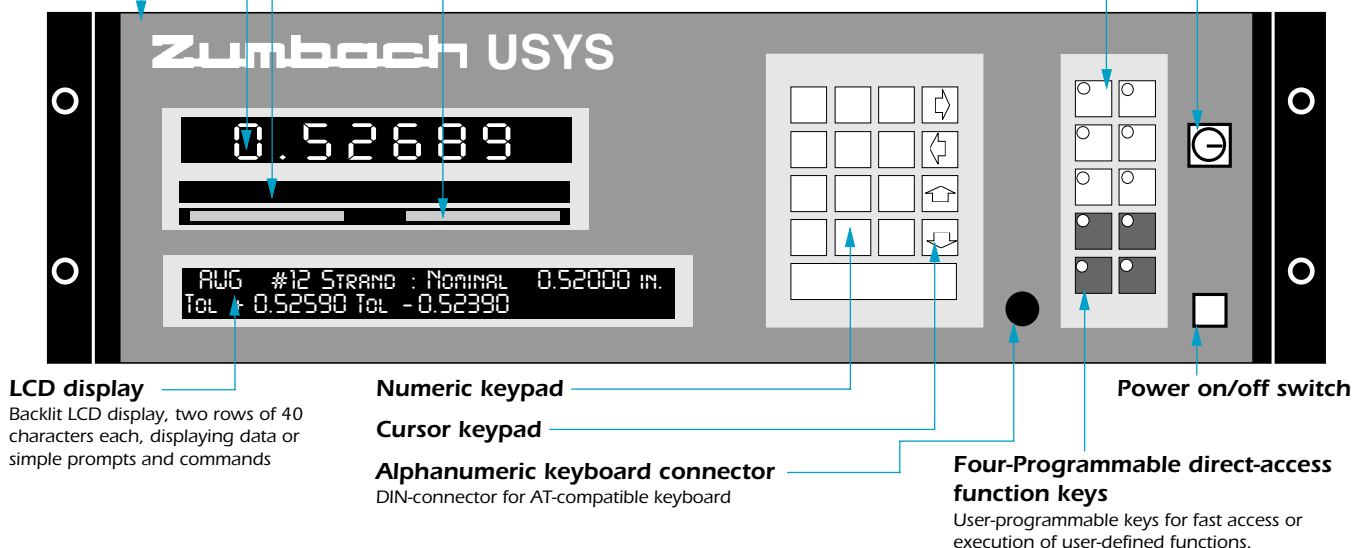
Alarm display

Visual alarm for Hi/Lo tolerance limits.

Direct-access function keys

Functions and displays frequently used can be called up directly from anywhere in the command tree ("controller on/off, selected displays, active product parameters").

Security lock (rotary key switch)



SYSTEMS OVERVIEW

USYS 100 REAR PANEL INPUTS AND OUTPUTS

Processor/Motorola I/O channel

2-slot backplane supporting the main systems processor and up to two input/output cards needed to interface the system to the "outside world."

Spare I/O channel

Alarm/analog output expansion offers tolerance pre-alarm, SPC trend alarm, and additional alarm and analog outputs.

Battery

To maintain the system's real-time clock and active product table when power is off.

Mains connector / fuse

Integrated connector with built-in fuse and mains filter.

(2x) Serial input / output port RS-232

Both ports can be configured for voltage, active or passive current loop, multidrop, and linked with a systems printer, host computer, and a remote display.

Measuring head connector

Amphenol connector for the connection of any digital ODAC J-type diameter sensor, single or dual plane. (Analog heads can be interfaced with optional conversion card N6.IO.011.)

Diameter measuring heads

With a measuring range from 0.012 mm (.0005 in.) to 318 mm (12.5 in.).

Single plane

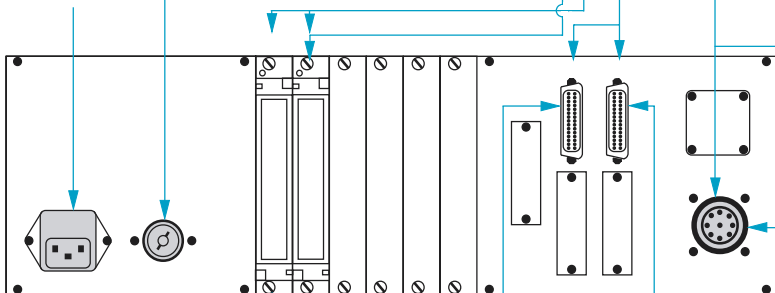


ODAC 2 J	ODAC 146
ODAC 16 J	ODAC 150 J
ODAC 24 J	ODAC 151 J
ODAC 30 J	ODAC 250 J
ODAC 81 J	ODAC 300 J
ODAC 82 J	

Dual plane



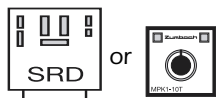
ODAC 15XY-J	ODAC 75XY-J
ODAC 32XY-J	ODAC 76XY-J
ODAC 35XY-J	ODAC 148XY-J



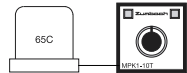
Alarm outputs

N/O SPST relay contacts
Analog absolute or deviational output

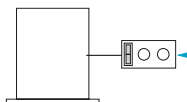
Solid State Regulating Device
or MPK 1-10T Motorized
Potentiometer Control of line
speed/extruder screw r.p.m.



MPK 1-10T / 65C Regulating unit
with micro Servo Valve for
control of internal air support
pressure.



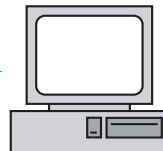
MV3-RK
Motorized Vacuum Controller



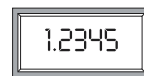
Line speed/footage counter input
Proximity Detector/AWG 2/TI 069

Event inputs (lumps, neckdowns, spark
failures, reel change, etc.)

Chart recorder (analog)



or



or



or



Host computer/main frame
up/download.

**Ask for literature on our PC-
Link concept.**

Remote display

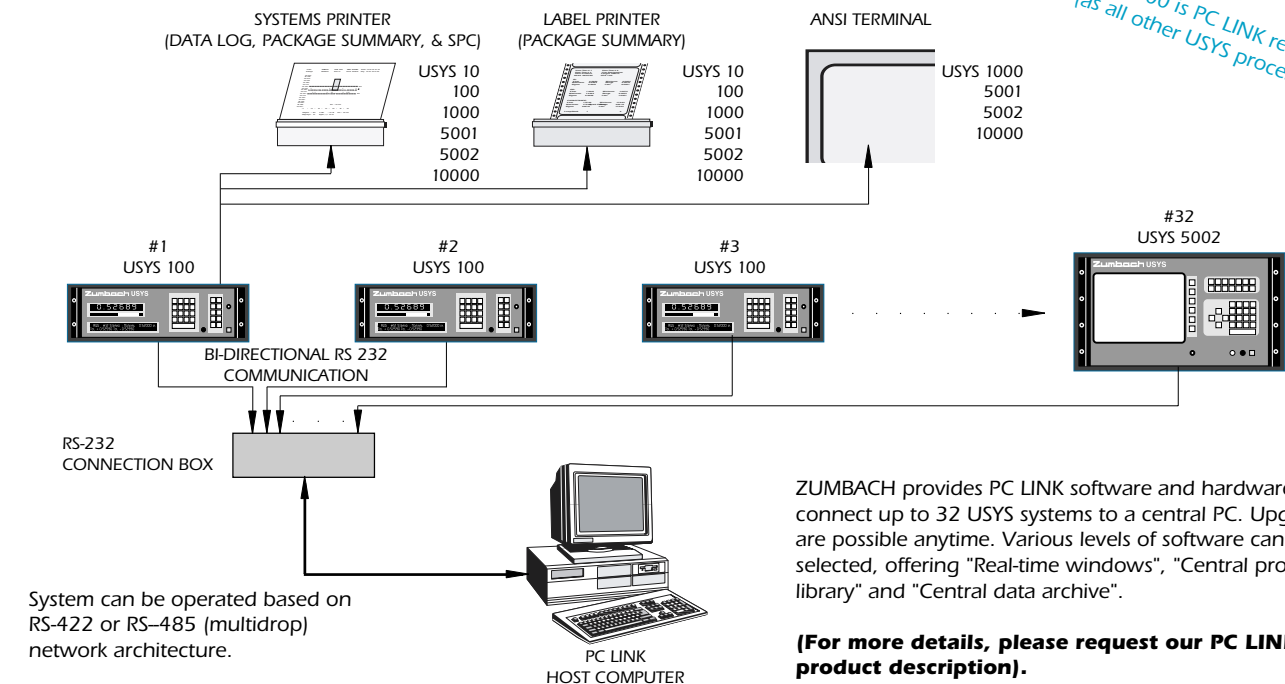
System printer
(desktop or rack mount)
- data logging
with length data
- reel-end reports

Label printer / tag printer
reel end summary printed
onto self-adhesive labels or
tags (contents configurable
by user).

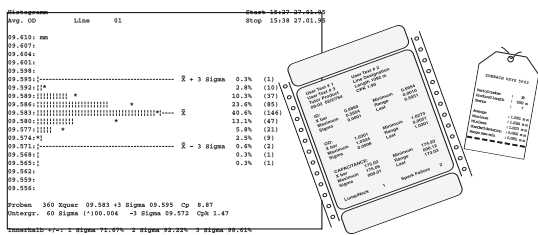
USYS - the diameter monitoring and control systems operators love: easy to use - dependable - smart

PC-LINK, NETWORK MULTIPLE USYS PROCESSORS WITH A HOST PC

USYS 100 is PC LINK ready! -
(as all other USYS processors)



COMPREHENSIVE SPC/SQC DATA ACQUISITION



- USYS 100 generates QC records as per your requirements
- Reel end reports (Package summary) printed onto tags or labels
- Full SPC charts with trend alarm (real-time display on terminal and/or printout).

SMART CLOSED LOOP CONTROL SYSTEM

SIGMA EXPERT™ with "CpK PILOT" function

USYS 100 features the continuously self tuning SIGMA EXPERT controller with SPC enhanced algorithms.

The "CpK PILOT" option will maximize material savings while assuring adherence to the pre-set quality level (CpK).

SPECIFICATIONS

Power

90 - 127 or 180 - 254 V AC (selectable), 50/60 Hz, max. 200 VA

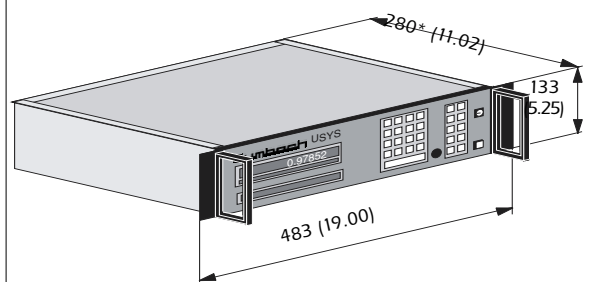
Operating temperature

0 - 50°C (32 - 120°F)

Weight

Approx. 11.5 kg (25 lbs)

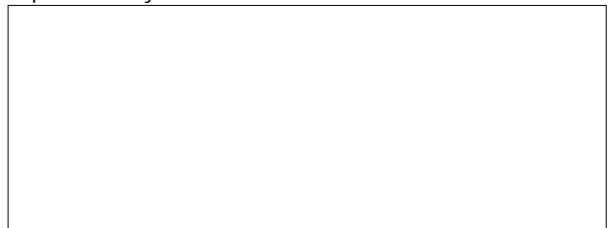
DIMENSIONS



OPTIONS AND ACCESSORIES

- Case for 19 in. chasis
- Floor stand cabinet
- Remote alarm panel
- Alphanumeric keyboard
- ANSI video display
- Systems printer
- Label / tag printer

Represented by:



▪ Subject to change without notice

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