Zumbach

SWISS PRIME MEASURING SINCE 1957

# USYS® 20

## Economic Processor for Diameter or Capacitance Measurement, Data Acquisition, Processing, Display & Control

## HIGH-TECH, INDUSTRIAL DATA ACQUISITION SYSTEM WITH A HUMAN TOUCH

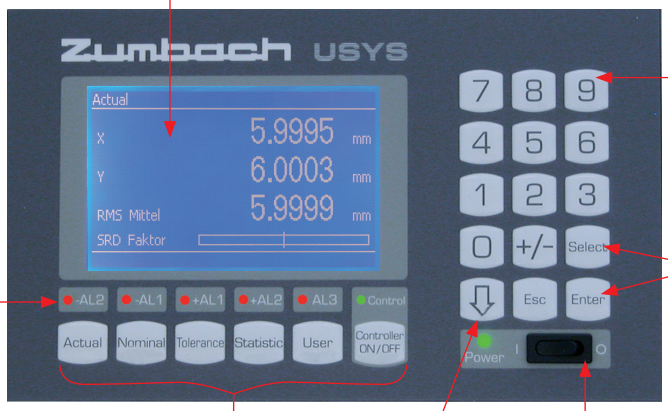
The system features real-time, multi-tasking data processing and control. USYS® 20 accepts measurements from a broad line of ZUMBACH gauges covering a diameter or width range from 0.012 mm (0.00047 in.) to 550 mm (21.6 in.) with a selectable resolution of up to 0.0001 mm (0.000004 in.).

- **Complete system for one measuring point**
- **Simultaneous display of 3 measured values**
- **Industrial, rugged design**
- **High-contrast LCD monochrome screen (240 x 128 pixels)**
- **Alarm displays**
- **Real-time data collection**
- **Reel and session reports**
- **DDC – Direct Dynamic Control system**
- **SRD – Static Regulating Device**

## USER FRIENDLY CONTROL PANEL WITH EASY MENU NAVIGATION

Heavy duty industrial grade front panel. Membrane covered mechanical switches feature tactile and audio feedback.

**Screen**
**4.2" LCD graphical display**
with protection glass




**Numeric keypad**
These keys are used for numeric data entry.

**Select / Enter keys**
Clearly marked keys used in connection with systems and product information.

**6 bright LED's**
Alarm displays (tolerance, pre-alarm and other limit exceedings), controller (Control)

**Direct access function keys**
Functions and displays frequently used can be called up directly (controller ON/OFF, nominal, tolerance etc.).

**Navigation key**

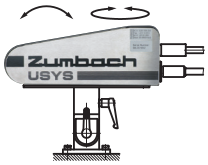
**Power ON/OFF switch**

## FLEXIBLE MOUNTING POSSIBILITIES

### Table top use

Standard

With fixation set for table top no. USY.0002.930

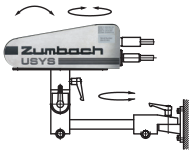



### Wall mounting

Using the fastening rails included in the delivery.

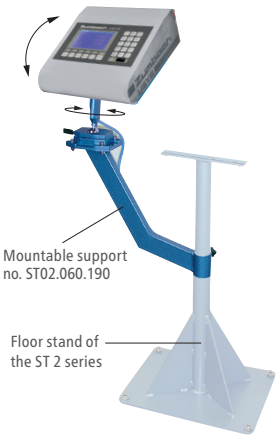
By means of the rotary holder, no. USY.0002.910

With pivot arm, no. USY.0002.920




### Mounting onto a floor stand ST 2

Thanks to a mountable support the USYS® 20 table top unit can easily be added onto a floor stand of the ST 2 series.



Mountable support no. ST02.060.190

Floor stand of the ST 2 series

### 19" rack mounting

This 19" drawer allows the mounting of 1 or 2 USYS® 20.

Note:
A suitable housing is optionally available (no. A32 100 0330).

# REAR PANEL INPUTS, OUTPUTS AND PERIPHERALS (OPTIONS)

## Measuring head connector
One unit from the wide range of digital 1, 2 or 3 axis ODAC® diameter measuring heads can be connected. Instead of the diameter measuring head, it is also possible to connect a capacitance measuring system of the CAPAC® J series.

1 axis measuring heads

2 axis measuring heads

3 axis measuring heads

## Port 1
## Serial interface
Can be configured for the connection with a printer (Continuous or label printer) or a remote display.

## Port 2
## Serial interface
For the communication with a higher level host computer

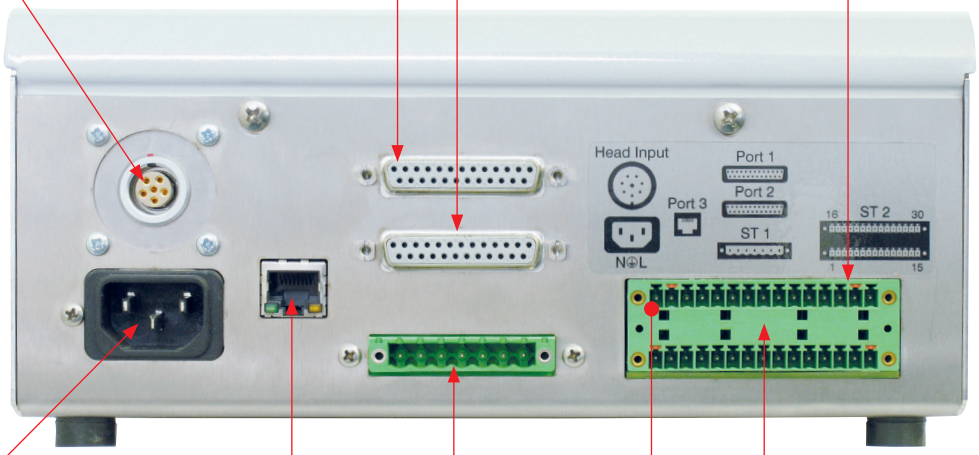
or

the connection with USYS® Data Log from Zumbach

or

a remote display

## MV
Motorized vacuum controller




## Mains connector/fuse
Integrated connector with built-in fuse and mains filter.

## Port 3
## Ethernet interface
With TCP/IP protocol for the integration of the USYS® 20 into a local network (LAN). Communication with a higher level host computer or linked with USYS® Data Log from Zumbach.

## Relay output
Offers 3 configurable relay outputs (e.g. system alarm, tolerance alarm). It also enables the connection of an external control pulse for the automatic control of the equipment (e.g. vacuum controller).

## I/O connector
Following inputs/outputs are available:
– 4 digital inputs (e.g. statistics, start/stop, pause)
– 5 digital outputs (tolerance alarms, pre-alarms)
– 1 counter input (e.g. for the line speed)
– 1 analogue output +/- 10 V

The connections can be extended, by means of the optional Static Regulating Device, with 2 additional digital inputs and 1 static regulating device (analogue input and output).

## "SRD" Static Regulating Device
Control of line speed/ extruder screw r.p.m.

## Line speed/footage counter input
Proximity detector

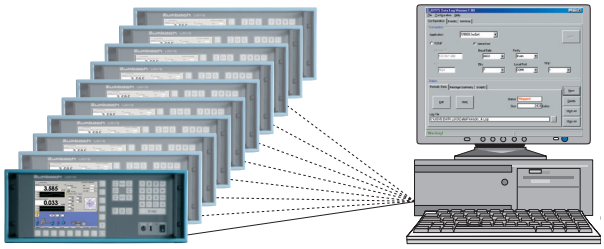
## Event input
Lumps, neckdowns, spark failures, reel change etc.

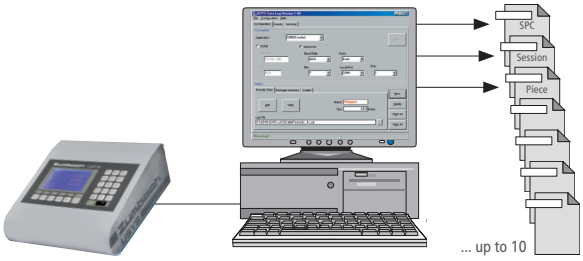
## Data collection
Start/stop and pause input

## USYS® DATA LOG

The USYS® Data Log is a Windows™ based software, offering an easy way to configure specific data acquisition (logging and archiving) from ZUMBACH processors onto customer PCs.
The measurement data can be collected from a single instrument or from several ZUMBACH processors and saved in a text file format or in Excel™. USYS® Data Log communicates with the processors through a serial interface or an Ethernet TCP/IP connection.

™ Windows and Excel are trademarks of Microsoft Corporation

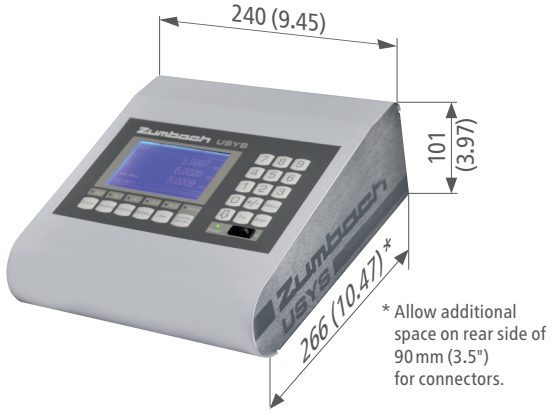





### Multiple Collection

Several USYS® Data Log programs can run on the same PC, i.e. it is possible to collect the information of all Zumbach processors in the factory to only one single computer.

## DIMENSIONS



Dimensions in mm (in.)

## MAIN SPECIFICATIONS

**Electrical power supply**

| | |
|---|---|
| Mains voltage: | 115 V / 230 V~ |
| Tolerance: | -10...+6 % |
| Mains frequency: | 48...62 Hz |
| Power: | max. 200 VA |

**Temperature range**

| | | |
|---|---|---|
| Operating: | 0...50° C | (32...120° F) |
| Transport / storage: | -20...70° C | (-4...140° F) |

**Protection** IP 51

**Weight**

| | | |
|---|---|---|
| Table top version: | 3.4 kg | (7.5 lbs.) |
| 19'' rack version: | 11.5 kg | (25 lbs.) |

• Specifications are subject to change without notice

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