

The ECOCONTROL processor systems convince with their fascinating performance. On 22", 15" and 10" TFT color monitors with touchscreen operation the measuring values of the connected measuring devices are clearly presented numerically and graphically.

## Processor systems with outstanding performance

Choose the extremely innovative and powerful ECOCONTROL 6000, the unique ECOCONTROL 1000 or the smart ECOCONTROL 600. Each of these display and control systems exceed all expectations in their class. The innovative display of the line with pictograms of the connected devices provides a unique overview, while the numeric and graphic display of the measuring values, trend diagrams and statistics fulfill every demand regarding the process visualization. The 22", 15" and 10" TFT monitors and the intuitive touchscreen control of the ECOCONTROL 6000, 1000 and 600 processor systems represent an intelligent and cutting-edge technology.

### Automatic diameter/wall thickness control

In combination with the control module SET POINT, the ECOCONTROL systems deliver quality assurance and cost reduction. They ensure a continuous, automatic control of the diameter or wall thickness to the nominal value by controlling either the line speed or the extruder rpm.

### Hot/Cold Module HC 2000 (ECOCONTROL 6000/1000)

With the Hot/Cold Module HC 2000, the material shrinkage is continuously calculated and considered automatically for the control of the diameter and/or wall thickness.

### CD-Control for wire and cable production lines

Taking into consideration, that diameter and capacitance influence each other, the SIKORA CD-Control compensates the necessary correction in the control process by an advanced calculation of the expected changes of the respective other measuring parameters.

### FFT analysis/Structural Return Loss (SRL)

Optionally, the ECOCONTROL 6000 visualizes periodical variations of the product parameter from an FFT analysis of the measuring values as well as the Structural Return Loss (SRL) data, that is specifically tailored to the requirements of the production of data and RF cables. This software package was developed with the support of competent partners of the industry and detects weak points of the production in time.

### Data Storage

The data storage on a hard disk is a standard for the ECOCONTROL 6000. For the ECOCONTROL 1000, this feature is optionally available. For the ECOCONTROL 600, an external media storage (USB, LAN) is available upon request.

### Reporting

Time, length or reel related production reports are available for each of the three ECOCONTROL devices (6000, 1000, and 600).

### VIRTUAL 2000 – Intelligent software concept

The virtual gauge technology is suitable for all applications, which require a fast wall thickness control, but due to line configuration or product structure, a diameter or wall thickness measurement directly after the extruder is not possible.

## ECOCONTROL 6000

The ECOCONTROL 6000 is an extremely powerful processor system, which clearly brings the measuring values of the connected diameter and concentricity devices into focus. In total, up to 8 measuring and testing devices can be connected to the ECOCONTROL 6000. The measuring values are displayed numerically as well as graphically on a 15" or 22" TFT monitor. A clear line presentation with pictograms of the connected devices provides additional information. Moreover, it contains a time and length-related trend diagram for the measured dimensions and a display of the statistical distribution curve of the measurements with the minimum, maximum and mean value, standard deviation, Cp and Cpk.

Interesting is the USB interface, which is accessible from the front as well as the overlay keyboard visible at the push of a button.

<b>TFT Color Monitor</b>	22" (vertical) alternatively 15", horizontal
<b>Serial interface RS485 for the connection to measuring devices</b>	8*
<b>Electrically isolated digital inputs for the connection to testing devices</b>	8*
<b>Analog inputs 16 Bit ± 10 V (bipolar)</b>	8*
<b>Analog outputs 16 Bit ± 10 V (bipolar)</b>	8*
<b>Contact outputs for tolerance and status messages (max. 30 V, max. 0.5 A)</b>	8*
<b>Communication interface via RS232 or LAN</b>	1*
<b>Interface for printer</b>	1*
<b>Electrically isolated input for rotary pulse generators (0/15 V)</b>	1
<b>Electrically isolated interface module for control of the diameter (HC 2000)</b>	1*
<b>USB Customer Interface</b>	1
<b>Industrial fieldbus (e.g. Profinet IO, EtherNet/IP, Profibus-DP, CANopen, DeviceNet )</b>	Yes*
<b>LAN interface (selectable OPC DA/UA/SuiteLink)</b>	1*
<b>WLAN (WiFi)</b>	1*
<b>Storage</b>	SSD
<b>Power Supply</b>	100 - 240 V AC ± 10 %, 50/60 Hz

\*Depending on the equipment

## ECOCONTROL 1000

The ECOCONTROL 1000 offers two serial interfaces for the connection of measuring devices such as SIKORA's [LASER Series 2000](#) or [LASER Series 6000](#) models. Additionally, two test devices, for example of the [LUMP 2000](#) series can be connected. The measured values are displayed on a 15" TFT touchscreen monitor. The ECOCONTROL 1000 also includes a time or length related (optional) trend diagram of all values, combined with a graph of the distribution of the single values (statistical distribution curve) and comprehensive statistics with the minimum, maximum and mean value, standard deviation, Cp and Cpk values. The operation is intuitive, menu-driven via a touchscreen.

<b>TFT Color Monitor</b>	15"
<b>Serial interface RS485 for the connection to measuring devices</b>	4*
<b>Electrically isolated digital inputs for the connection to testing devices</b>	4*
<b>Analog inputs 16 Bit ± 10 V (bipolar)</b>	4*

Analog outputs 16 Bit ± 10 V (bipolar)	4*
Contact outputs for tolerance and status messages (max. 30 V, max. 0.5 A)	4*
Communication interface via RS232 or LAN	1*
Interface for printer	1*
Electrically isolated input for rotary pulse generators (0/15 V)	1*
Electrically isolated interface module for control of the diameter (HC 2000)	1*
USB Customer Interface	1
Industrial fieldbus (e.g. Profinet IO, EtherNet/IP, Profibus-DP, CANopen, DeviceNet )	Yes*
LAN interface (selectable OPC DA/UA/SuiteLink)	1*
Storage	SSD
Power Supply	100 - 240 V AC ± 10 %, 50/60 Hz
*Depending on the equipment	

## ECOCONTROL 600

The ECOCONTROL 600 offers one serial interface for the connection of a SIKORA measuring device. Additionally, via two digital contacts events from a [LUMP 2000](#) for the detection of lumps and neckdowns can be read.

The measuring values are displayed numerically and graphically on a clear 10" TFT monitor. Also, there is a graphical time- or length-related (optional) trend diagram for all values combined with a graph of the distribution of the single values (statistical distribution curve) and statistics with the minimum, maximum value, the mean, standard deviation, Cp and Cpk values. The operation is menu-driven via a touchscreen.

TFT Color Monitor	10"
Serial interface RS485 for the connection to measuring devices	1
Electrically isolated digital inputs for the connection to testing devices	4*
Contact outputs for tolerance and status messages (max. 30 V, max. 0.5 A)	4*
Communication interface via RS232 or LAN	1*
Interface for printer	1*
Electrically isolated input for rotary pulse generators (0/15 V)	1*
USB Customer Interface	1
Ethernet interface (OPC DA/Suitelink)	1*
Storage	External Media (optionally)
Power Supply	100 - 240 V AC ± 10 %, 50/60 Hz
*Depending on the equipment	

## FIBER ECOCONTROL

The FIBER ECOCONTROL is an extremely powerful display and control processor system, which clearly visualizes the measuring values of the connected measuring devices and lump detectors of the FIBER Series 6000.

The measuring values are displayed numerically and graphically on a 15" TFT monitor. In addition, it includes a time-related trend diagram of all values and a display of the distribution of single values (statistical

distribution curve) and comprehensive statistics with the minimum, maximum and mean values, standard deviation, Cp and Cpk values. The operation is intuitive and menu-driven via touchscreen. Data Storage is available.

#### Automatic diameter control

A special feature of the FIBER ECOCONTROL is the control module SET POINT. It ensures a continuous control of the diameter by automatically controlling the line speed or tension. The control is done either by the hot or cold measuring gauge.

<b>Display</b>	15" TFT touch monitor
<b>Display of Production and Product Parameters</b>	<ul style="list-style-type: none"> <li>- Diameter</li> <li>- Ovality</li> <li>- Tension</li> <li>- Spinning</li> <li>- Concentricity</li> <li>- Temperature</li> <li>- Airlines</li> <li>- Vibration frequency</li> <li>- Optical fiber position with scatter plot presentation</li> <li>- Trend and statistics</li> <li>- Number of lumps/neckdowns</li> </ul>
<b>LAN interface for the connection of the gauges FIBER LASER 6003, FIBER LASER 6003 CCE</b>	1
<b>Serial interfaces RS485 for the connection of the gauges FIBER LUMP 6003, FIBER LASER 6003 AIRLINE, FIBER TEMP 6003 (optional 8 outputs available)</b>	4
<b>Analog outputs 16 Bit, unipolar 0 to 10 V or bipolar -10 to +10 V (optional)</b>	4
<b>Contact outputs for tolerance or status messages (max. 30 V, max. 0,5 A; optional 8 outputs available)</b>	4
<b>Communication interface via RS232 or LAN (optional)</b>	1
<b>Speed input analog 0 to 10 V or electrically isolated input for rotary pulse generators (0/15 V)</b>	1
<b>USB customer interface as well as USB interface for a printer (optional)</b>	1
<b>LAN interface (selectable OPC DA/UA/SuiteLink - optional)</b>	1
<b>Additional inputs and outputs, e.g. Profinet IO, EtherNet/IP, or control modules are optionally available</b>	
<b>Data Storage</b>	SSD, USB memory stick or network
<b>Power Supply</b>	100 - 240 V AC $\pm$ 10 %, 50/60 Hz, 24 V on request

All ECOCONTROL processor systems contain a time and length related trend diagram for all values, combined with a graph of the distribution of the single values (statistical distribution curve), and a comprehensive statistic with the minimum, maximum and mean value, standard deviation, Cp and Cpk values. The operation is intuitive with the menu-driven touchscreen.

## Your Benefits

- TFT color monitor to display the measured values with excellent brilliance
- Customizable display and control functionality
- Easy to adapt
- User-friendly touchscreen operation