



Enhanced Data Control & Display

GCS 505 View&Control for Woodward 505, 505E, and 505 Enhanced Digital Steam Turbine Controls



Governor Control Systems has developed an innovative solution to monitor, control and troubleshoot Woodward 505, 505E, and 505 Enhanced digital controls. Using an advanced hardware platform combined with powerful software, the **GCS 505 View&Control** allows operators and supervisory personnel to view a series of screens and to remotely monitor their control systems.

Control and data monitoring

HMI's may be used as building blocks in Supervisory Control and Data Acquisition (SCADA) systems: a higher level package that incorporates multiple processes into one integrated monitoring control unit.

Window into the control system

505 View&Control displays:

- Start/Stop/Reset
- Emergency Shutdown
- Synchronizing
- Speed/Load Operations
- PID Control
- Frequency Control
- Setpoint Adjustment
- Alarm & Event Log
- Trends
- I/O Status

GOVERNOR CONTROL SYSTEMS, INC.

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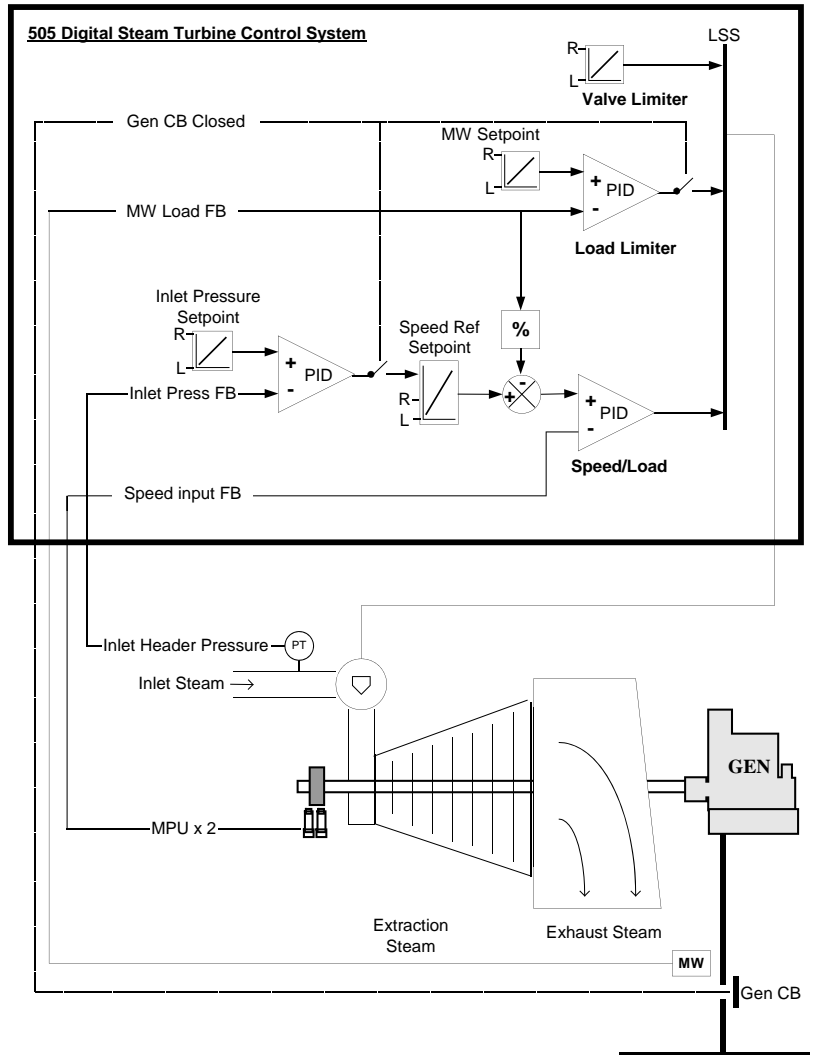
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GCS 505 View&Control

- Operator-friendly window into control system
- Remote monitoring of data
- 24/7 trends and alarm logging
- Improved fault finding and troubleshooting
- Track historical data
- Event log records operator input
- Self configuring
- Web enabled via Ethernet
- Serial communications interfaces with control
- Rugged industrial hardware
- Multi-language plug-in
 - English
 - Spanish
 - Portuguese
- Password protected
- Software + 17" monitor p/n 2800-5101
- Software + 15" monitor p/n 2800-5102
- Software only* p/n 2800-5201
- Instruction manual

Typical 505 Turbine Speed and Load control, IPC
(Inlet Pressure Control) with Generator MW Load Limiting



Software

The **View&Control** application software is a powerful suite of automation software tools, with scalable building blocks for developing HMI, SCADA (Supervisory Control and Data Acquisition) systems and embedded instrumentation and control applications. The operator panel communicates with Woodward digital speed controls using a serial communications interface.

*Software only version available for Windows XP/XPe for 17" monitor, 1280 x 1024 maximum display

Hardware

Operator panel is a state-of-the-art 15" or 17" industrial color touch screen with XP embedded, and 8 GB of Flash. The industrialized HMI does not have any moving parts, making it more robust and less susceptible to failure than a conventional panel with a hard disk drive.

Web Access

The **View&Control** can be configured to share the screens in a local Ethernet, allowing any computer connected to the same network to access the operator panel. Up to 32 users may be connected at the same, monitoring the system and viewing any of the available screens.

"We are very impressed by the GCS Engineering Team's responsiveness to our needs, providing custom programming, remote monitoring and a new reliable system . . ."

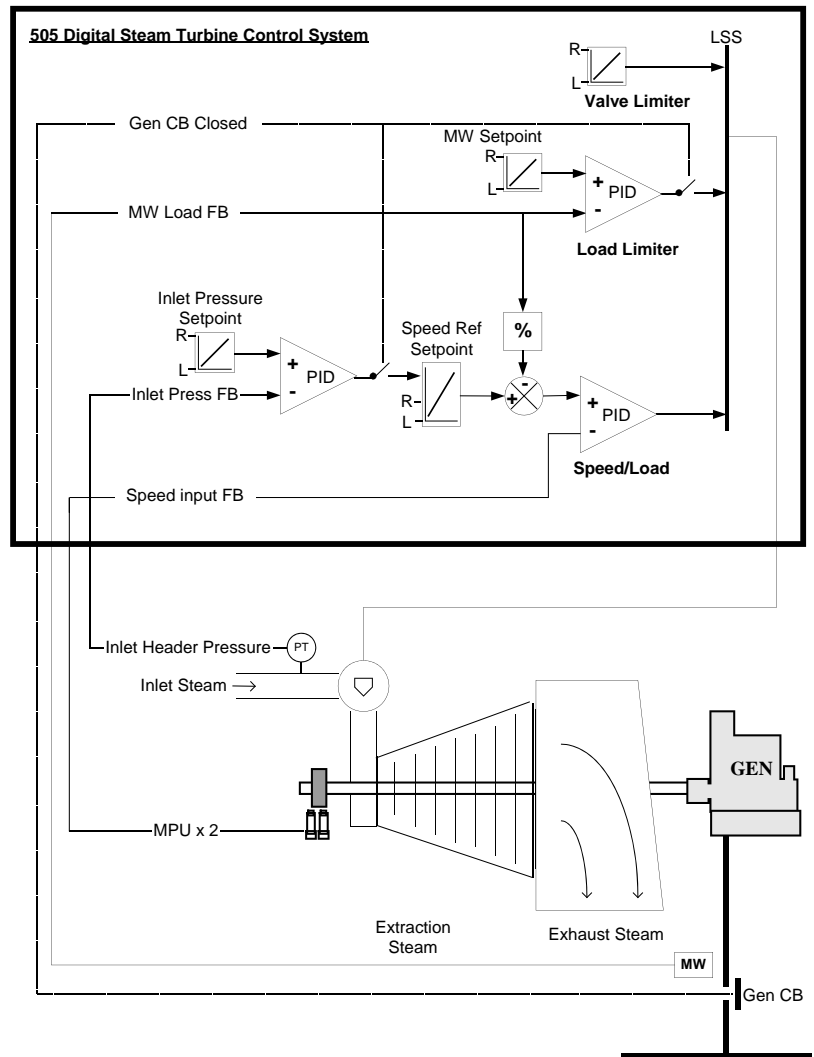
FKEC

(Florida Keys Electric Cooperative Association, Inc.)

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	15" HMI	17" HMI
General		
• BIOS	Award® 4 MB	Award® 4 MB
• Certifications	BSMI, CCC, CE, FCC, UL	BSMI, CCC, CE, FCC, UL
• Cooling System	Fanless Design	Fanless Design
• Dimensions (WxHxD)	383 x 307 x 65 mm (15.08" x 12.09" x 2.56")	414 x 347.5 x 93 mm (16.3" x 13.68" x 3.66")
• Enclosure	Front Bezel: Die-Cast Al Alloy Back Housing: ABS + PC	Front Bezel: Die-Cast Al Alloy Back Housing: ABS + PC
• Mounting	Desktop, Wall, or Panel Mount	Desktop, Wall, or Panel Mount
• OS Support	Windows XP/2000/CE, WinXPe	Windows XP/XPe
• Power Consumption	60W	100W
• Power Input	18 ~ 32 Vdc	18 ~ 32 Vdc
• Watchdog Timer	1 sec (system)	1 sec (system)
• Weight (Net)	5.5 kg (12.13 lb)	8 kg (17.64 lb)
System Hardware		
• CPU	Celeron M 1 GHz , 512k cache	Celeron M 1 GHz , 512k cache
• Memory	512 MB DDR SDRAM	1GB 240pin DIMM DDR2 SDRAM
• LAN	2 x 10/100/1000Base-T	2 x 10/100/1000Base-T
• Expansion Slots	1 x CompactFlash® Slot 1 x PCMCIA	1 x CompactFlash® Slot 1 x PCI-104 (optional)
• Storage	1 x 2.5" PATA HDD (optional)	1 x 2.5" SATA HDD (optional)
• Keyboard/Mouse Ports	1 x PS/2 each	1 x PS/2 each
• Serial Ports	2 x RS-232, 1 x RS-232/485/422	3 x RS-232
• USB Ports	2 x USB 2.0	4 x USB 2.0
• Video Ports	1 x VGA	1 x VGA
• Audio Ports	1 x MIC-in, 1 x Line-in, 1 x Line-out	1 x MIC-in, 1 x Line-in, 1 x Line-out
LCD Display		
• Display Size	15"	17"
• Display Type	XGA TFT LCD	SXGA TFT LCD
• Max Resolution	1024 x 768	1280 x 1024
• Max Colors	262 K	16.7 M
• Luminance (cd/m ²)	350	300
• Viewing Angle (H/V°)	120/100	160/160
• Backlight Life	50,000 hrs	50,000 hrs
• Contrast Ratio	500:1	800:1
Touchscreen		
• Lifespan	1 million touches at a single point	1 million touches at a single point
• Light Transmission	Above 75%	Above 75%
• Type	8-wire, Analog Resistive	8-wire, Analog Resistive
Environment		
• Humidity	10 ~ 95% RH @ 40° C, non-cond	10 ~ 95% RH @ 40° C, non-cond
• Ingress Protection	Front Panel: NEMA4, IP65	Front Panel: NEMA4, IP65
• Operating Temperature	0 ~ 50° C (32 ~ 122° F)	0 ~ 45° C (32 ~ 113° F)
• Storage Temperature	-20 ~ 60° C (-4 ~ 140° F)	-20 ~ 60° C (-4 ~ 140° F)
• Vibration Protection	With HDD: 1grms (5 ~ 500 Hz) (Operating, Random Vibration)	With HDD: 1grms (5 ~ 500 Hz) (Operating, Random Vibration)



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