



IPT3 Boiler Control Panel Introduction





Overview:

The IPT3 boiler control panel can be used to hot water boilers, steam boilers, vacuum boilers, thermal oil boilers, modular boilers, DC boilers, numerical control boilers, hot air boilers and other furnace types. Relying on the experience of many technicians in the control of industrial boilers, it is designed and manufactured according to industrial standards for the special use environment of boilers, with high anti-interference performance. Various boiler intelligent control software modules are built in, which can be flexibly configured into a high-performance boiler control system and a networked control system.



Technical Parameters:

- ★ Man-machine interface: 10-inch true color touch screen (resolution 1024*600), acrylic panel
- ★ AI analog input (detection temperature, pressure signal): 7-way (PT100/4-20mA switchable)
- ★ Di switch input (detection of water electrode, floating ball and other feedback signals): 12-way passive contact signal input + 4-way 220V AC voltage signal input
- ★ Ao analog output (adjusting frequency converter, electric control valve output): 2 -way



- ★ RS-485 communication interface: 1 channel (MODBUS slave protocol) + 1 channel (MODBUS slave protocol) / analog switch expansion module host protocol.
- ★ Internet interface: Ethernet (RJ45 optional) or connect to RS-485 communication interface through DTU to realize networking
- ★ Dimensions(w x H X D mm): 282*190*70mm
- ★ Installation method(w x H mm): Embedded Hole size: 274*182mm



Function:

- Direct connection with temperature sensors such as Pt100, without transmitter conversion.
- The temperature sensor is connected by a three-wire system, and the line resistance does not cause measurement errors.
- Receive the signal of the electrode type water level sensor directly, eliminating the liquid level relay.
- Detection circuit prevents galvanic corrosion of electrodes.
- Each relay has an independent passive double-ended output, no common terminal is used.



- It is convenient to connect controlled equipment with different working voltages or different phases, without switching through intermediate relays.
- It can directly receive 220V strong electric signals such as burner failure, without intermediate relay conversion.
- The switch signal input has a complete protection circuit, which can save a large number of intermediate relays.
- Built-in multi-channel PID module (optional), which can realize burner ratio adjustment control, continuous water supply control and other functions.





Integrated PLC Control Range

	Gas fuel	Oil fuel	Coal/Biomass fuel	Electricity
Steam Boiler	Burner program control/safety protection Steam pressure control (stage fire/ratio adjustment) Boiler water level control (position type/single impulse/double impulse/three impulse) Boiler body safety protection	Burner program control/safety protection Steam pressure control (stage fire/ratio adjustment) Boiler water level control (position type/single impulse/double impulse/three impulse) Oil tank and daily oil tank control Boiler body safety protection	Combustion sequence control and safety protection (FD fan/ID fan/grate) Steam pressure control (FD fan/grate) Furnace Negative Pressure Control (ID Fan) Boiler water level control (position type/single impulse/double impulse/three impulse) Boiler auxiliary machine control (feeder/slag remover) Boiler body safety protection	Electric heating tube sequence control/safety protection Steam pressure control (electric heating tube start/stop) Boiler water level control (position type/single impulse/double impulse/three impulse) Boiler body safety protection
Hot water boiler	Burner program control/safety protection Outlet water temperature control (segment fire/ratio debugging) Circulating water pump control (start/stop/frequency conversion) Boiler body safety protection	Burner program control/safety protection Outlet water temperature control (segment fire/ratio debugging) Circulating water pump control (start/stop/frequency conversion) Oil tank and daily oil tank control Boiler body safety protection	Combustion sequence control and safety protection (FD fan/ID fan/grate) Outlet water temperature control (FD fan/grate) Furnace Negative Pressure Control (ID Fan) Circulating water pump control (start/stop/frequency conversion) Boiler auxiliary machine control (fuel feeder/slag remover) Boiler body safety protection	Electric heating tube sequence control/safety protection Outlet water temperature control (electric heating tube start/stop) Circulating water pump control (start/stop/frequency conversion) Boiler body safety protection



<p>Vacuum hot water boiler</p>	<p>Burner program control/safety protection Heating medium water temperature control (segment fire type/ratio debugging) Vacuum control Boiler body safety protection</p>	<p>Burner program control/safety protection Heating medium water temperature control (segment fire type/ratio debugging) Vacuum control Oil tank and daily oil tank control Boiler body safety protection</p>		
<p>Thermal oil boiler</p>	<p>Burner program control/safety protection Thermal oil outlet temperature control (segment fire/ratio adjustment) Circulating oil pump control (start/stop/frequency conversion) Boiler body safety protection</p>	<p>Burner program control/safety protection Thermal oil outlet temperature control (segment fire/ratio adjustment) Circulating oil pump control (start/stop/frequency conversion) Boiler body safety protection Oil tank and daily oil tank control</p>	<p>Combustion sequence control and safety protection (FD fan/ID fan/grate) Thermal oil outlet temperature control (FD fan/grate) Furnace Negative Pressure Control (ID Fan) Boiler water level control (position type/single impulse/double impulse/three impulse) Boiler auxiliary machine control (feeder/slag remover) Boiler body safety protection</p>	



Hot air boiler	Burner program control/safety protection Hot air outlet temperature control (stage fire/ratio adjustment) Boiler body safety protection	Burner program control/safety protection Hot air outlet temperature control (stage fire/ratio adjustment) Boiler body safety protection Oil tank and daily oil tank control	Combustion sequence control and safety protection (FD fan/ID fan/grate) Hot air outlet temperature control (FD fan/grate) Furnace Negative Pressure Control (ID Fan) Boiler water level control (position type/single impulse/double impulse/three impulse) Boiler auxiliary machine control (feeder/slag remover) Boiler body safety protection	
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