

Industrial Automation

Catalog 07 • 2012

eAutomation Solution



Industrial Automation

Catalog 01 • 2012

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Catalog 07.2012

**For the latest updates of this catalog, please
visit our Industry Web:**

www.yottacontrol.com

**The products contained in this catalog can also
be found in the interactive catalog .**

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Introduction

The members of the Yottacontrol Product family

Timer/Counter/Tachometer

TC-PRO2400/TC-PRO48x Series



Digital Time Switch

TS-4848x Series



Programmable Logic Controller

AL Series/AM Series



Distributed Control System

A Series Distributed Control System



Industrial Communication

A Series Communication Convert



Remote Modules

A Series I/O Modules



Text Panel

A Series Text Panel



Software

AL Edit/AM Edit/Yotta Edit/Tc-Soft/Yotta Utility/A-152xU driver/AMB64 driver
/A-1571U driver

Accessories

AL Series/AM Series/TC Series/TS Series/A Series



Timer/Counter/Tachometer

TC-Pro2400

OVERVIEW



- ▲ 8-digit high resolution LCD(8mm high)
- ▲ Manual reset & external reset
- ▲ 25 functions(15 timer functions,8 counter functions, frequency meter & tachometer)
- ▲ Programmable reset button to prevent wrong-button push

Technical specifications

Type	TC-Pro2400
Size	48x24x45.7(Unit : mm)
Timer range	0-99999999
Counter range	0-99999999
Response frequency	0.6Hz~10000Hz
RPM range	36~60000(unit: Round per minute)
Functions	25Functions (15 Timer + 8 Counter + Frequency Meter + Tachometer)
Power supply	DC3V Batteries
Batteries Life	>2 years
Operation temperature	-10℃~55℃
Display Type	LCD
Screw Type	M3
Front panel waterproof protection	IP66
Rear panel waterproof protection	IP20
Vibration	IEC60068-2-6
Static discharge	IEC1000-4-2(4KV Air/2KV contact)
Electromagnetic field	IEC1000-4-3(field strength 10V/m, frequency 80MHz~1GMHz)
Shock pulse	IEC1000-4-4(1KV input)
Weight	about 33g
Opening size	45x22(unit : MM)

For further information, please visit: www.yottacontrol.com/tcp2400.html

Timer/Counter/Tachometer

TC-Pro48 Series

OVERVIEW



- ▲ Highly visible display with backlit LCD
- ▲ Conform to the key design of ergonomics
- ▲ Five key protection modes: KP-1~5
- ▲ EEPROM(overwrites:100,000 times min.)
- ▲ 12VDC external supply power
- ▲ Applied to connect PC/HMI/PLC/DCS
- ▲ Free PC software “TC-SOFT”
- ▲ Support Modbus Protocol
- ▲ Support RS-232/485/422

Technical specifications

Type	TC-Pro480x	TC-Pro481x	TC-Pro482x
	TC-Pro480x-D	TC-Pro481x-D	TC-Pro482x-D
Classification	Digital Timer	Digital Counter /Tachometer	Digital Timer/Counter /Tachometer
Supported configurations	Timer, Dual Timer, 2-Stage Timer	1-stage counter, 2-stage counter, total counter, batch counter, dual counter, and tachometer	Timer, Dual Timer, 2-Stage Timer, 1-stage counter, 2-stage counter, total counter, batch counter, dual counter, and tachometer
Operating voltage range	100~240VAC(50/60HZ), 24VDC		
Installation	DIN rail or wall mounting		
Max. counter speed	None	30HZ or 5KHZ (10KHZ for Tachometer)	30HZ or 5KHZ (10KHZ for Tachometer)
Timer mode	Elapsed time (UP), Remaining time (down) (selectable)	None	Elapsed time (UP), Remaining time (down) (selectable)
Input method	No-voltage input : ON impedance : 1kΩ max. Voltage Input : High(logic) level : 4.5~30 VDC Low(logic) level : 0~2 VDC(Input resistance: approx. 4.7 kΩ)		
Interface	RS-232/485/422		
Control output	Relay contact output: 5A at 250 VAC Transistor output: NPN open collector, max. 100mA at 30 VDC		

For further information, please visit : www.yottacontrol.com/tcp48x.html

Digital Time Switch

TS-4848 Series

OVERVIEW



- ▲ BSC and ADV for selection
- ▲ Two independent output circuits
- ▲ 20 banks (groups) of operation times
- ▲ Cyclic operation and pulse operation
- ▲ Temporary holiday settings
- ▲ Summer time adjustment
- ▲ Manual operation to control output ON/OFF
- ▲ Override and automatic return function
- ▲ Key protection function
- ▲ Data information reserved > five years
- ▲ Support Modbus Protocol
- ▲ Free PC software “Yotta Utility”

Technical specifications

Type	TS-4848SRAC	TS-4848CRAC-D	TS-4848SRDC	TS-4848CRDC-D
supply voltage	100~240VAC(50/60HZ)		24VDC	
voltage range	85%~110% rated supply voltage		85%~120% rated supply voltage	
control outputs	Relay contact output: 5A at 250VAC Transistor output: NPN, max.100mA at 30VDC			
Storage temperature	-25 ~ 65℃（with no icing or condensation）			
Operation temperature	-10 ~ 55℃（with no icing or condensation）			
Ambient operation humidity	25% ~ 85%			
Case color	Black			
Installation	DIN rail or wall mounting			
Interface	--	RS-232/485/422	--	RS-232/485/422
Modbus Support	--	RTU + ASCII	--	RTU + ASCII
Power consumption	Nearly 2.4W		Nearly 0.96W	

For further information, please visit : www.yottacontrol.com/ts48.html

Programmable Logic Controller

AL Series

OVERVIEW



- ▲ FBD System
- ▲ Reduces maintenance overhead
- ▲ Password protection
- ▲ 34 integrated function, pre-tested functions
- ▲ Linking of 160 function block is possible
- ▲ Eight digital inputs , Four digital outputs
- ▲ Display of message texts
- ▲ Integrated data latch
- ▲ Up to 32 DIs, 24 DOs and 2 AIs
- ▲ Free PC software “AL Edit”

Technical specifications

Type	AL-SD0R	AL-XD1R	E24-0R	E24-1R	E4-0R	E4-1R
Inputs	8	8	16	16	--	--
Analog inputs	--	2	--	--	--	--
Input/ supply Voltage	100/240 VAC	24 VDC	100/240V AC	24 VDC	100/240 VAC	24 VDC
Outputs(relays)	4	4	8	8	4	4
Continuous current	10 A for resistive load, 3 A for inductive load					
Integrated time switches/reserve power	Yes/typ. 128 h		--			
Operation temperature	-10°C to +55°C					
Storage temperature	-20°C to +70°C					
Degree of protection	IP 20					
LCM	YES		--			
Linking of functions	160		--			
Input Operating frequency	2000HZ		50HZ			
Interface	RS-232/485/422		--			
Installation	DIN rail or wall mounting					

For further information, please visit : www.yottacontrol.com/al.html

Programmable Logic Controller

AM Series

OVERVIEW



- ▲ LD System
- ▲ Reduces maintenance overhead
- ▲ Password protection
- ▲ 153 integrated function
- ▲ Linking of 8000 steps is possible
- ▲ Eight digital inputs , Eight digital outputs
- ▲ Include Display
- ▲ Integrated data latch
- ▲ Up to 64 DI, 64 DO and 4 AI
- ▲ Four 10-bit analog inputs
- ▲ Free PC software “AM Edit”

Technical specifications

Type	AM-XD0R	AM-XD1R	E24-0R	E24-1R	E4-0R	E4-1R
Inputs	8	8	16	16	--	
Analog inputs	4(10-bit)	4(10-bit)	--			
Input/ supply Voltage	100/240 VAC	24 VDC	100/240 VAC	24 VDC	100/240 VAC	24 VDC
Outputs(relays)	8	8	8	8	4	4
Continuous current	10 A for resistive load, 3 A for inductive load					
Integrated time switches/reserve power	Yes/typ. 128 h		--			
Operation temperature	-10 °C to +55°C					
Storage temperature	-20°C to +70°C					
Degree of protection	IP 20					
Linking of Step	8000		--			
LCM	YES		--			
Input Operating frequency	5000HZ		1HZ			
Interface	RS-232/485/422		--			
Installation	DIN rail or wall mounting					

For further information, please visit : www.yottacontrol.com/am.html

Distributed Control System

A series Distributed Control System

OVERVIEW



- ▲ FBD + LD System
- ▲ Support Start-up Screen (108*64)
- ▲ Multiple communication port
- ▲ Password protection, copy protection
- ▲ 36 integrated function, pre-tested functions
- ▲ Linking of 1024 function block is possible
- ▲ Display of message texts, adjust program parameter
- ▲ Integrated data latch
- ▲ Flexibly expandable up to 10000 points
- ▲ Support full Modbus protocol
- ▲ Free PC software“Yotta Edit”+“Yotta Utility”

Technical specifications

Type	A-1188S	A-1188	A-1188D	A-1189S	A-1189	A-1189D
	A-1188S-T	A-1188-T	A-1188D-T	A-1189S-T	A-1189-T	A-1189D-T
Digital Inputs	8			8		
Analog Inputs	--			4 (able to use in digital specification)		
Digital Outputs	4			4		
Input voltage range	Digital ON: 4~30VDC OFF:2VDC(max)			Digital ON: 4~30VDC OFF:2VDC(max)		
				Analog: 0~10VDC		
Continuous Current	Relay: 5 A for resistive load, 2 A for inductive load Transistor: NPN open collector, max. 100mA at 30 VDC					
Incoming Power	10~30 VDC					
reserve power	> 10 years					
Operation temperature	-20℃ to +75 ℃					
Storage temperature	-25 ℃ to +80 ℃					
Linking of functions	1024(Max)					
Real time clock	Yes/>2 years					
Protocols	Modbus ASCII + Modbus RTU					
Incorporate operator interface	Yes- with Modbus interface					
Expansion maximum I/O	More than 10000					
Input Operating frequency	15000HZ(DI0~DI3)/50HZ(DI4~DI7)					
Message text/ display	4 lines of 12 characters					
Communication Port	RS232*1	RS485*2 +RS232*1	RS485*2 +RS232*1	RS232*1	RS485*2 +RS232*1	RS485*2 +RS232*1
Type Instruction	A-118XS: Without LED indicator and LCD monitor, Relay output A-118XS-T: Without LED indicator and LCD monitor, Transistor output A-118X: LED indicator, Relay output A-118X-T: LED indicator, Transistor output A-118XD: LCD monitor, Relay output A-118XD-T: LCD monitor, Transistor output					

For further information, please visit : www.yottacontrol.com/dcs.html

Industrial Communication

A Series Communication Convert

9

OVERVIEW



- ▲ Auto Tuner baud rate, 300~115200bps
- ▲ 3000VDC isolation protection
- ▲ ESD protection
- ▲ Power Inputs +10~+30VDC (RS-232 type)
- ▲ No external power supply (USB type)
- ▲ Fully compliant with USB 1.1 / 2.0
- ▲ DIN-Rail or wall mounting
- ▲ Driver support Windows 98/ME/2000 /XP/Window7/WinCE/Mac/Vista/Linux /Windows Server 2008 R2/Android

Technical specifications

Type	A-1520		A-1521	A-1520U	A-1521U	A-1571U
Interface	RS-232 TO RS-485	RS-232 TO RS-485/422/232	USB TO RS-485	USB TO RS-485/422/232	USB TO RS-485/422/232	
Speed	Auto Tuner baud rate, 300~115200 bps					
Transfer distance	Max. 1,200 m for speed 9.6 K bps; Max. 400 m for speed 115.2 K bps					
Supports Max device	Maximum of 256 devices (Without repeater)					
ESD Protection	Yes					
Supply Voltage	10~30VDC			--		
Power Consumption	Nearly 24V/0.5W			Nearly USB Port/0.5W		
OS Driver	--			Windows 98 / ME / 2000 / XP Window7(32/64 bit)/WinCE /Vista (32/64 bit) /Linux /Mac		Windows 98 / ME / 2000 / XP/Window7(32/64bit) /WinCE/Vista (32/64 bit) /Linux /Mac /Windows Server 2008 R2/Android
Operation temperature	-20℃ to +75℃					
Storage temperature	-25℃ to +80℃					
Installation	DIN-Rail or wall mounting					
Connection	DB9(Female to RS-232)/USB(Type B); Removable 13-pin Terminal Block (For RS-422 / 485 / 232)					

For further information, please visit : www.yottacontrol.com/comm.html

Remote Modules

A Series Remote I/O Modules

OVERVIEW



- ▲ RS-485 Interface
- ▲ Supports Modbus RTU / ASCII
- ▲ LED Indicators
- ▲ Isolation voltage: 5000 V DC
- ▲ Wide operation temperature : -20 ~ +75 °C
- ▲ Dual watchdog timer
- ▲ Surge , EFT and ESD protection
- ▲ Free PC software “Yotta Utility”

Technical specifications

Type	A-1057	A-1058	A-1068	A-1069	A-1051	A-1055	A-1055S	A-1060
Output	12	12	8	8	--	8	8	4
Input	--				16	8	8	8
Power Consumption	Nearly 24VDC 0.96W	Nearly 24VDC 0.96W	Nearly 24VDC 1.68W	Nearly 24VDC 2.88W	Nearly 24VDC 1.66W	Nearly 24VDC 1.28W	Nearly 24VDC 1.28W	Nearly 24VDC 2.26W
Input Power	+10 ~ +30 VDC							
Output Type	Source	Sink	Signal Relay	Power Relay	--	Sink	Source	Power Relay
Input Type	--				Isolated Digital			
Output Rating(max)	10 – 35 VDC/1A	40VDC /200mA	120VAC /0.5A 30VDC/1A	250VAC /5A 30VDC/1A	--	40VDC /200mA	10- 35VDC/1A	250VAC /5A 30VDC/1A
Input Rating (Isolation)	--				- Logic level 0: +1 V max. - Logic level 1: +3.5 ~ 30 V			
Isolation Voltage	5000 V DC							
LED	Yes							
Modbus Support	Modbus RTU + Modbus ASCII							
Watchdog Timer	System m & Comm.							

For further information, please visit : www.yottacontrol.com/rm.html

Text Panel

A Series Text Panel

OVERVIEW



- ▲ Plug-and-Play
- ▲ Support Start-up Screen
- ▲ RS-485 Interface
- ▲ Full Support A-1x Series Control
- ▲ Resolution : 192 x 64 pixels
- ▲ Wide Operation Temperature : -10 ~ +60 °C
- ▲ Dual Watchdog Timer
- ▲ Surge , EFT and ESD Protection
- ▲ Brightness : 60cd/m2
- ▲ Input Power : +10 ~ +30 VDC

Technical specifications

Type	ATP
Screen Type	4.3" STN-LCD
Display Color	Monochromatic
Backlight	The back-light automatic turn off time is 5 sec (On = do not turn off)
Resolution	192 x 64 pixels
Display Range	96x32mm
Start-up Screen Size	108*64 Bmp(1-bit)
Interface	RS-485
Input Power	10 ~ 30 VDC
LCM life	With 25±2°C , 65±10% RH over 50000 hours
Brightness	60cd/m2
Contrast	Adjustable resistor
Cooling Method	Natural air cooling
Operation temperature	-10°C to +60 °C
Storage temperature	-20 °C to +70 °C

For further information, please visit : www.yottacontrol.com/atp.html

Software

Application Software



AL Edit

- Support Model: AL series
- Support OS: Windows 98 / ME / 2000 / XP / Vista / Window7



AM Edit

- Support Model: AM series
- Support OS: Windows 98 / ME / 2000 / XP / Vista / Window7



Yotta Edit

- Support Model: A series Distributed Control System
- Support OS: Windows 98 / ME / 2000 / XP / Vista / Window7



TC-Soft

- Support Model: TC-Pro48 series
- Support OS: Windows 98 / ME / 2000 / XP / Vista / Window7



Yotta Utility

- Support Model: TS-4848 series/A series Distributed Control System/A Series Remote Modules
- Support OS: Windows 98 / ME / 2000 / XP / Vista / Window7



A-152xU driver/AMB64 driver

- Support Model: A series Industrial Communication/A series Memory card
- Support OS: Windows 98 / ME / 2000 / XP / Window7(32/64 bit)/WinCE /Vista (32/64 bit) /Linux /Mac



A-1571U driver

- Support Model: A series Industrial Communication
- Support OS: Windows 98 / ME / 2000 / XP / Window7(32/64 bit)/WinCE /Vista (32/64 bit) /Linux /Mac /Windows Server 2008 R2/Android

For further information, please visit : www.yottacontrol.com/download.html

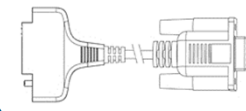
Accessories

All Type

OVERVIEW

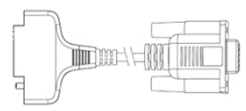
CAB-090A232

TC-Pro48x
RS-232 cable



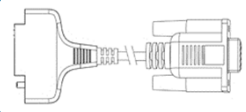
CAB-090A485

TC-Pro48x
RS-485 cable



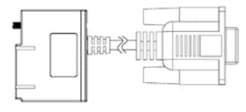
CAB-090A422

TC-Pro48x
RS-422 cable



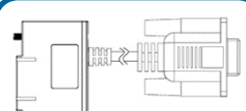
CAB-090B232

TC-Pro48x-D/TS-48x-D
RS-232 cable



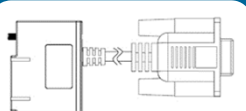
CAB-090B485

TC-Pro48x-D/TS-48x-D
RS-485 cable



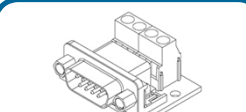
CAB-090B422

TC-Pro48x-D/TS-48x-D
RS-422 cable



ADP090401

All type
Adapter board



SVF-A

TC-Pro48x/TS-48x
Panel protective cover



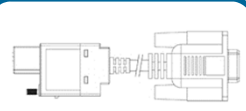
MCD-256

AL Series/AM Series
Memory card



CAB-090C232

AL Series/AM Series
RS-232 cable



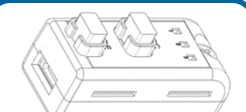
CAB-090C485

AL Series/AM Series
RS-485 cable



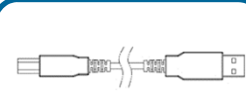
AMB64

A Series DCS Series
Memory card



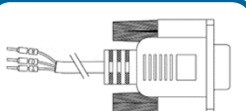
USB1800

A Series Convert
USB cable



DSCAB

A Series DCS Series
Adapter cable



For further information, please visit : www.yottacontrol.com/acc.html



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