



# Data Acquisition Modules

## A-10x Series RS-485 Digital I/O Modules

### OVERVIEW

- ✿ Use for ATC Whole Series Controller
- ✿ RS-485 Interface
- ✿ Support Modbus RTU/ASCII Protocol
- ✿ LED Indicator
- ✿ Operation Temperature -20~+70°C
- ✿ Isolation Voltage:5000VDC
- ✿ Daul Watchdog Timer
- ✿ Surge, EFT And ESD Protection
- ✿ Low Power Indicator
- ✿ Operation Rang: Up To 1200 Meters
- ✿ Free Monitor PC Software "ATC Utility"



### SPECIFICATIONS

Type	A-1057	A-1058	A-1068	A-1069	A-1051	A-1055	A-1055S	A-1060
Digital Inputs	—				16	8	8	8
Digital Outputs	12	12	8	8	—	8	8	4
Input Type	—				NPN/PNP(Digital Optical Isolation)			
Input Logic	—				Status Low:<1VDC, Status High:5~30VDC			
Output Type	Source	Sink	Signal Relay	Power Relay	—	Sink	Source	Power Relay
Output Power	10~35VDC /1A	10~40VDC /200mA	120VAC/0.5A /30VDC/1A	250VAC/5A /30VDC/5A	—	10~40VDC /200mA	10~35VDC /1A	250VAC/5A /30VDC/5A
Isolation	5000VDC							
Indicator	Yes							
Interface	1*RS-485							
Protocol	Modbus RTU + Modbus ASCII							
Operation Temp	-20~+70°C							
Operation Volt	10~30VDC/24VAC							
Power consumption	24VDC 0.96W	24VDC 0.96W	24VDC 1.68W	24VDC 2.88W	24VDC 1.66W	24VDC 1.28W	24VDC 1.28W	24VDC 2.26W

# Data Acquisition Modules

## A-10x Series RS-485 Analog I/O Modules

### OVERVIEW

- ✿ Analog Input 16-bit Resolution
- ✿ Analog Output 12-bit Resolution
- ✿ Support Analog Input/Output 0/4~20mA Or 0~10V
- ✿ Support PT-100 Or PT-1000(2/3/4-wired)
- ✿ Support J,K,T,E,R,S,B Thermocouple
- ✿ Support 10K/6.8K/4.7k/3.3k/2.7k/2.252k/2.1k/2k/1.5k/1k Thermistor
- ✿ Burn-out Detection
- ✿ Hi-Speed RS-485 Interface(Max 921600bps)
- ✿ Dual Watchdog Timer
- ✿ Support Modbus RTU/ASCII
- ✿ Surge, EFT And ESD Protection
- ✿ Low Power Indication
- ✿ Operation Rang: Up To 1200 Meters
- ✿ Free PC Software "ATC Utility"



### SPECIFICATIONS

Type	A-1010/A-1010+	A-1012/A-1012+	A-1019/A-1019+
Analog Input	8(10-Bit)	4(16-Bit)	8(16-Bit)
Analog Output	2(10-Bit)	2(12-Bit)	—
Digital Input	—	2	4
Digital Output	4	2	—
Analog Input Type	0~10V	2*0/4~20mA,2*PT-100/1000	0/4~20mA,J,K,T,E,R,S,B Thermistor(-270~+1800℃)
Analog Output Type	0~10V	0/4~20mA	—
Analog Input Impedance	Voltage:10MΩ	Current:100Ω,RTD:10MΩ	Current:100Ω,Voltage:10MΩ
Analog Input/Output Accuracy	±1%/±1%	±0.1%/±1%	±0.1%/---
DO Continuous Current	10-40VDC/200mA	10-35VDC/1A	—
Sampling Rate	10 Sample/Second(Totle)		
Operation Temperature	-20~+70℃		
Operation Voltage	10~30VDC/24VAC		
Note	*A-1010+/A-1012+/A-1019+ Is Isolation Type Analog Acquisition Module		

# Data Acquisition Modules

## A-18x Series Ethernet Digital/Analog I/O Modules

### OVERVIEW

- ✿ Analog Input 16-bit Resolution
- ✿ Analog Output 12-bit Resolution
- ✿ Support Analog Input/Output 0/4~20mA
- ✿ Support PT-100 Or PT-1000(2/3/4-wired)
- ✿ Support J,K,T,E,R,S,B Thermocouple
- ✿ Support 10K/6.8K/4.7k/3.3k/3k/2.7k/2.252k/2.1k/2k/1.5k/1k Thermistor
- ✿ Burn-out Detection
- ✿ Support 8 Independent Sockets Simultaneously
- ✿ Remote Monitoring And Control With Mobile Devices
- ✿ Support MODBUS TCP/IP Protocol
- ✿ Flexible User-defined Modbus Address
- ✿ Output Support (OCP)/(OTP)/(UVLO)
- ✿ Support LAN 10/100Mbps Communication Rate
- ✿ Free Monitor PC Software "ATC Utility"



### SPECIFICATIONS

Type	A-1851	A-1812	A-1819	A-1855	A-1855S	A-1860	A-1869
AI	—	4(16-Bit)	8(16-Bit)	—	—	—	—
AO	—	2(12-Bit)	—	—	—	—	—
DI	16	2	—	8	8	8	—
DO	—	—	—	4	4	4	8
AI Type	—	2*0/4~20mA, 2*PT-100/1000	0/4~20mA,J,K,T,E,R,S,B Thermistor(-270~+1800℃)	—	—	—	—
AO Type	—	0/4~20mA	—	—	—	—	—
AI Impedance	—	Current:100Ω, RTD:10MΩ	Current:100Ω, Vlotage:10MΩ	—	—	—	—
AI/AO Accuracy	—	±0.1%/±1%	±0.1%/---	—	—	—	—
DO Continuous Current	—	—	—	8-60VDC /1.75A	10-40VDC /1A	250VAC/7A 30VDC/7A	250VAC/7A 30VDC/7A
Sampling Rate	10 Sample/Second(Totle)						
Protocol	MODBUS TCP						
Operation Temp	-20~+70℃						
Operation Volt	10~30VDC/24VAC						

# Distributed Control System

## A-51 Series Distributed Automation Controller

### OVERVIEW

- ✿ Creation of control programs in Function Block Diagram (FBD) or Ladder Diagram (LAD)
- ✿ 4-Axis Synchronous Motion, 100 KHz PWM (Total 400KHz)
- ✿ Able To Edit The Parameter Among The Controller Operation
- ✿ Built-in Standard RS-485 Port, Connect More Than 10000 IOs Via Remote IO Module
- ✿ Connect Encoder & Multi-Sensors Directly
- ✿ Built-in Step Motor Driver, Connect Directly
- ✿ 104 FBD Integrated Functions, 97 LD Integrated Functions
- ✿ High-Level Math Functions
- ✿ Communication Protocol MODBUS RTU/ASCII & Multi Format
- ✿ Communication Baud Rate 921600bps
- ✿ Multi Communication Parameter Function
- ✿ Output Support (OCP)/(OTP)/(UVLO)
- ✿ Independent Communication Port Which Can Communicate With 255 Units Modbus Devices Synchronized
- ✿ Custom Truth Table, Without Logical Analysis
- ✿ Free PC software“ATC Edit”+“ATC Utility”



### SPECIFICATIONS

Type	A-5190D A-5190	A-5188D A-5188 A-5188M	A-5188D-T A-5188-T A-5188M-T	A-5189D A-5189 A-5189M	A-5189D-T A-5189-T A-5189M-T	A-5191
DI/AI	2*Isolation DI Status Low:<2VDC Status High:>4VDC 2*0/4~20mA 2*PT-100/1000	8*Isolation DI Status Low:<2VDC Status High:>4VDC	8*Isolation DI Status Low:<2VDC Status High:>4VDC	4*Isolation DI Status Low:<2VDC Status High:>4VDC 4*Analog Input 0~10VDC	4*Isolation DI Status Low:<2VDC Status High:>4VDC 4*Analog Input 0~10VDC	16*Isolation DI Status Low:<2VDC Status High:>4VDC 4*Analog Input 0~10VDC
DO/AO	2*Transistor (Isolation) 2*0/4~20mA	4*Realy (Isolation)	4*Transistor (Isolation)	4*Realy (Isolation)	4*Transistor (Isolation)	10*Realy (Isolation)
Continuous Current	Realy:5A (with resistive load), 2A (with inductive load)/Transistor:10-60VDC/1.75A(OCP/OTP/UVLO)					
DO Frequency	Realy:30Hz/Transistor:100KHz					
DI Frequency	250KHz (DI0~DI3)					
Communication Ports	USB*1 & RS-485*1	USB*1 & RS-485*2 & RS-232*1				
Communication Baud Rate	1200~921600bps					
Operation Temp	-20~+70°C					
Operation Volt	10-30VDC/24VAC					

\*D = LCM Type / \*M = Micro-SD Type

For more information, please refer to  
[www.szatc.com](http://www.szatc.com)

# Communication Solutions

## Industrial Automation Communication Converter

### Modbus Gateway



Type: ATC-1300

- RS-232/422/485 3 in 1 Interface
- Standard Modbus TCP / Modbus RTU Protocol Conversion
- Supports Multiple Host Connections, Up To 16
- Simple, Efficient And Cost-effective



Type: ATC-3002

- Industrial High Performance MCU
- Standard Modbus TCP / Modbus RTU Protocol Conversion
- Supports Multiple Host Connections, Up To 10
- Support Modbus Master / Modbus Slave Mode Switching

### Industrial Automation Related Products

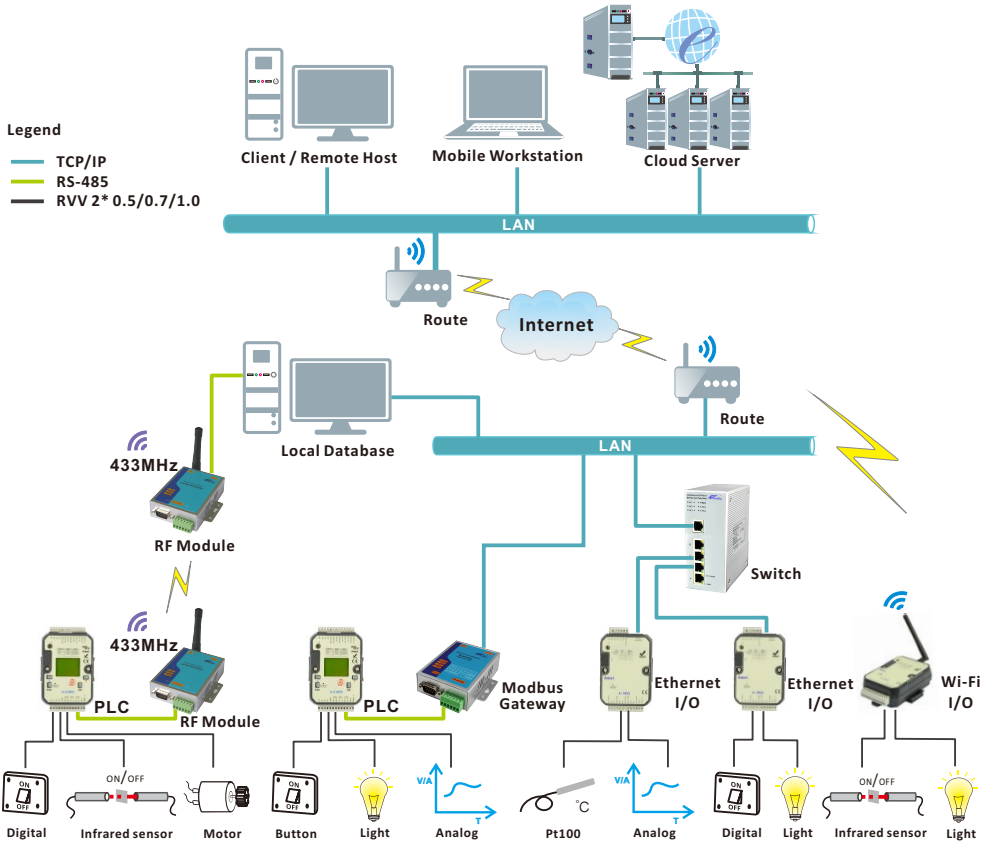
Solution	Function Description	Type	Note
Industrial Protocol Conversion Solution	Industrial Modbus Gateway RS-232/485/422 3 in 1 Support Modbus TCP/RTU/ASCII	ATC-1300 ATC-3002	ATC-1300 High Price Performance Recommended
Series Server Conversion Solution	Serial to Ethernet Converter RS-232/485/422 3 in 1 Support TCP/UDP Server / Client Support VSP	ATC-1000 ATC-1200 ATC-2000 ATC-3000	Data Transmission Mode: Transparent Transmission Support Web Page And Windows Software Configuration Parameters
Wireless RF Conversion Solution	Wireless RS-232/485 RF Module Transparent Data Transmission Point To Point Or Point To Multipoint Communication Good Reliability And Low Bit Error Rate	ATC-863 ATC-871 ATC-873 ATC-875	Frequency: 433MHz Can Provide 315/868/915MHz Visual Distance: 300/500/1Km/2Km
Industrial Interface Conversion Solution	Industrial Optical Isolation Converter Industrial Optical Isolation Repeater RS-232 Optical Isolator Industrial USB To RS-232 / 485 / 422 Converter	ATC-107N/108N ATC-109N ATC-131 ATC-810/820/850	RS-232C And RS-485 / 422 Standards Compatible With EIA / TIA Automatic Flow Control, Zero Delay Design Lightning Surge Protector
Industrial Ethernet Switch	Support 10M / 100M, Full / Half Duplex Mode Ethernet Port MDI / MDI-X Adaptive Ipv6 DSCP, TCP / UDP Protocol	ATC-405 ATC-408 ATC-205	5/8 Network Port Selectable Management / Unmanagement Type Selectable Support Rail And Wall Installation

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# Industrial Field Application

## Industrial Automation Data Monitoring System

### Remote Monitoring Application Diagram



Application Area: *Factory Automation* *Building Automation* *Mechanical Engineering*  
*SCADA* *Safety Lamp System* *Device Management*

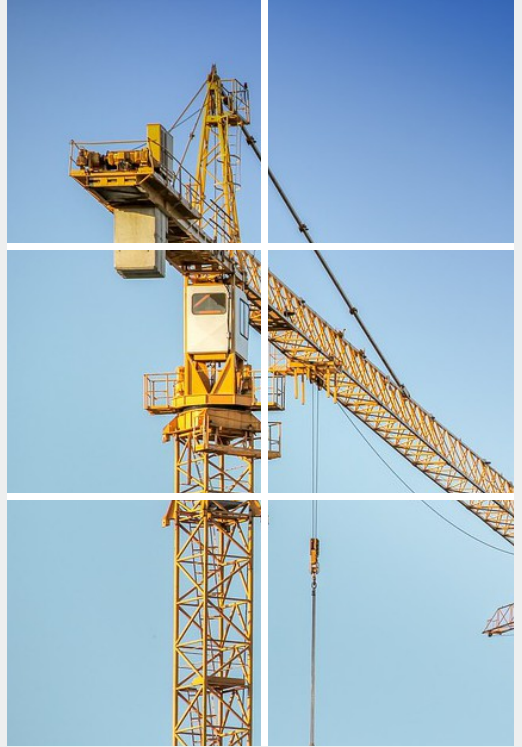
This application combines the field data acquisition and communication solutions, including RS485 bus I/O module, Ethernet I/O module, Wi-Fi I/O module, and the communication solutions include Modbus gateway / wireless 433MHz / Wi-Fi, etc. Through front-end collection equipment, local control center and remote terminal, and through cloud server, different types of data remote monitoring can be easily realized.

As an experienced supplier of data communication products, Shenzhen ATC Technology Co., Ltd. is counted on by many renowned buyers, such as ZTE, Car Part GmbH (from Germany), Emerson (from Australia), and so on. Car Part GmbH commented on our products like this: "Your products can meet our market requests and the quality makes us satisfied. Hope you can keep the basic of success".

Our company product solutions include: I/O module, DCS controller, Analog acquisition module, Serial device networking solution, industrial control interface conversion solutions, USB to serial port solutions, optical fiber communication solutions, wireless GPRS / CDMA, RF solutions, interface protection and lightning protection solutions, special requirements and customized solutions.

Every month, we can export 10,000 units of above products. Before production, our raw materials are checked again to make sure they are compliant with RoHS Directives. And all our export is CE-marked, finding good markets in many countries and regions including United Kingdom, Spain, Germany, Italy, Poland, Turkey, American, Canada, Brazil, Australia, Indonesia, Singapore, Malaysia, Vietnam and India.

Welcome to search high quality products at competitive prices from us.



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