

# SIMATIC 505

## General

### Application

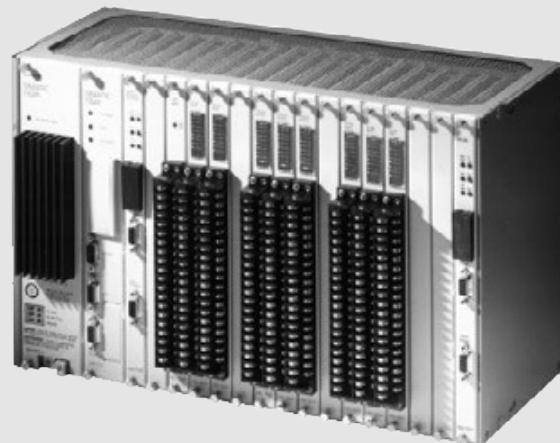


Fig. 5/1 SIMATIC 505 programmable controllers

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The SIMATIC 505 programmable controllers provide a special combination of open-loop control tasks, closed-

loop control tasks and complex mathematical functions for a large variety of applications in process engineering.

### Design

#### Compactness

The SIMATIC 505 programmable controllers have an extremely compact design corresponding to the state-of-the-art of integrated circuits (ASICs). The latest design technology ensures low space requirements with high performance. System costs and space requirements decrease at the same time as system reliability increases.

#### Intelligent I/O modules

The SIMATIC 505 programmable controllers have different digital, analog and intelligent I/O modules as well as communications processors available. There are digital module versions with 8, 16, 32 inputs/outputs, and relay module versions with 8, 16, 32 outputs. Analog input/output modules acquire signals from thermocouples and RTD inputs. In addition, there are AT-compatible PC modules and different communications processors (for example, with RS 232 interfaces) available.

#### Distributed control

The SIMATIC 505 programmable controllers let you take a truly distributed approach to your plant control. First of all they are designed to meet the latest IEC safety and reliability standards to withstand the toughest industrial environments so that they can be placed wherever they are needed. Secondly, a powerful, remote I/O capability enables I/O modules and subracks to be placed as far as 1000 m/3280 ft from the controller itself, thus eliminating the need for long, multiple cable runs to remote sensors and actuators.

**Design (continued)****Redundant systems**

For critical process applications, the SIMATIC 560T/TI565T systems can be combined with the TI505

I/O modules to form a redundant system. The redundant design reduces any possible down time to a minimum.

**Hot backup with single-channel I/O design**

The hot backup system consists of a redundant configuration of the CPUs.

The active PLC and the standby PLC are each equipped with a hot backup card.

A fiber-optic connection between the active and the standby PLC executes self monitoring and synchronization of the programs up to four times per cycle.

The active PLC updates the standby PLC automatically and hands over control as soon as a serious fault occurs.

The hot backup system requires no additional programming by the user.

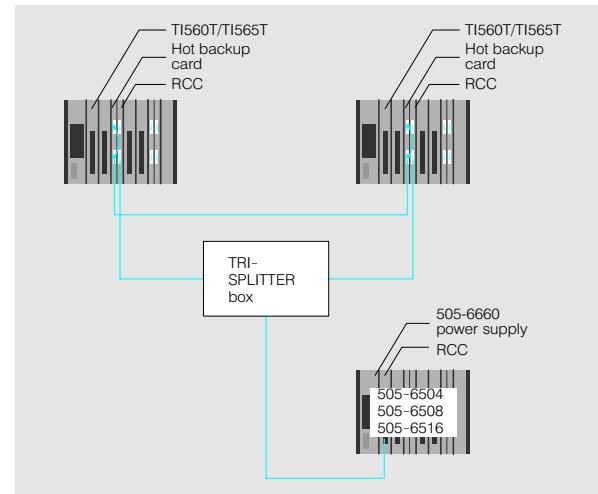


Fig. 5/2 Hot backup with single-channel I/O

It guarantees the integrity of both PLCs even during on-line program edits.

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**Hot backup with two-channel I/O design**

The TI505 I/O system can also operate redundantly. For this purpose, a special power supply module and the RBC (remote base controller) are installed redundantly (double) in a special redundantly designed mounting rack. The RF-RBC is an intelligent interface between the RCC (remote channel controller) and the redundant mounting rack.

The redundant mounting rack, equipped with 11 slots, contains two power supply modules (110/220 V AC or 24 V DC) and two RBCs. In addition, each redundant mounting rack has two cables so that if one line fails an automatic switch can be made to the other.

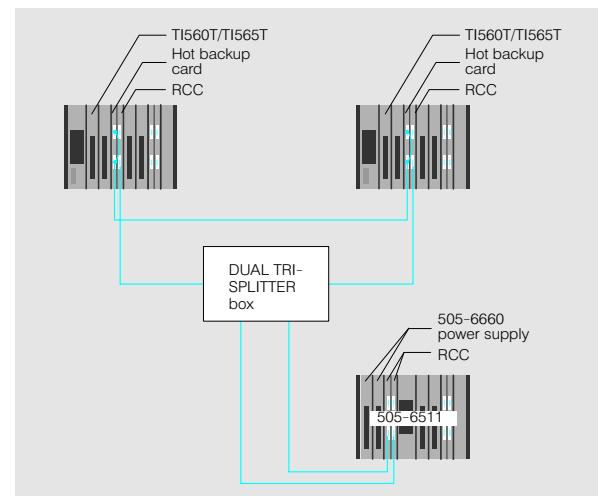


Fig. 5/3 Hot backup with two-channel I/O

In normal mode, one of the redundant RCBs is active and the other is in standby. If an fatal fault occurs in the active RCB, communications are automatically switched to the

redundant standby RCB. This takes place within one PLC cycle.

# SIMATIC 505

## General, Ordering Data

### Programming

Ease of use means different things to different people. That's why a choice of different development tools is offered. The SIMATIC TISOFT package is available for programming the PLC. For those with previous knowledge of process automation, there is SIMATIC APT.

SIMATIC APT uses CASE (computer-aided software engineering) technology which provides for a structured approach to programming while simultaneously enabling mastery of sequential control processes and continuous closed-loop control functions.

APT ensures that the programs are well structured and documented. The data coherence check reduces programming errors to a minimum.

### General technical specifications

#### Safety and reliability

SIMATIC 505 corresponds to the IEC 65A and DIN 41 494 standards for industrial and process control systems.

#### Insulation group

In accordance with IEC 801, Part 2, Paragraph 4.

Protection against static electrical discharge to 15 kV.

#### Temperature range

In accordance with IEC 68-2-14 NB.

Fault-free operation at temperatures fluctuating between 0 to 60 °C.

#### Humidity

In accordance with IEC 68-2-3 Ca.  
Fault-free operation under environmental conditions up to 95% humidity at 60 °C.

#### Mechanical shock test

In accordance with IEC 68-2-21 EA test.  
No detrimental effect in the case of non-repetitive shocks.

See Section 1 for further technical specifications

### Ordering data TI525 to TI565

Order No.

Order No.

#### Mounting racks

##### for TI505

4 slots

8 slots

11 slots, redundant

16 slots

**PPX:505-6504**

**PPX:505-6508**

**PPX:505-6511**

**PPX:505-6516**

**PPX:505-6660**

**PPX:505-6660-A**

**PPX:505-6663**

**PPX:525-1102**

**PPX:535-1212**

**PPX:545-1102**

**PPX:545-1103**

#### CPUs (continued)

##### Firmware upgrade kit

for TI545-1101 Version 2.1.1  
for TI545-1102 Version 3.1

##### TI555

8192 digital/8192 analog inputs/outputs,  
memory 384 KB,  
memory 1920 KB

##### TI560T (with power supply) for twisted-pair cable

- 110 V AC, RS 485, RCC
- 24 V DC, RS 485, RCC
- for coaxial cable connection
- 110 V AC, RCC
- 24 V DC, RCC

##### TI565T (with power supply) for twisted-pair cable

- 110 V AC, RS 485, RCC
- 24 V DC, RS 485, RCC
- for coaxial cable connection
- 110 V AC, RCC
- 24 V DC, RCC

**PPX:2601099-8005**

**PPX:2601099-8006**

**PPX:555-1101**

**PPX:555-1102**

**PPX:560T1KM-1101**

**PPX:560T1KM-1102**

**PPX:560T4KM-1101**

**PPX:560T4KM-1102**

**PPX:565T1KM-1101**

**PPX:565T1KM-1102**

**PPX:565T4KM-1101**

**PPX:565T4KM-1102**

#### TI525

Memory 10 KB,  
512 digital/128 analog inputs/outputs

#### TI535

Memory 40 KB,  
1024 digital/1024 analog inputs/outputs

#### TI545

Memory 192 KB,  
2048 digital/1024 analog inputs/outputs, 64 controllers

#### TI545

Memory 96 KB,  
1024 digital/1024 analog inputs/outputs, 16 controllers

Ordering data TI525 to TI565	Order No.	Order No.
<b>CPUs (continued)</b>		
<b>Programming manual for TI505</b>		
German	<b>PPX:505-8104D</b>	<b>PPX:505-6830</b>
English	<b>PPX:505-8104-5</b>	<b>PPX:505-6840</b>
Italian	<b>PPX:505-8104I</b>	<b>PPX:560-2126-B</b>
<b>Technical product description for TI525/TI535</b>	<b>PPX:505-8103</b>	<b>PPX:560-2127-B</b>
English		
<b>System manual for TI525, TI535</b>		
English	<b>PPX:505-8106</b>	<b>PPX:505-6850-A</b>
German <sup>1)</sup>	<b>PPX:505-8106D</b>	<b>PPX:505-6851-A</b>
French <sup>1)</sup>	<b>PPX:505-8106F</b>	<b>PPX:500-2114-A</b>
<b>Technical product description for TI545/TI555</b>		
CPU 1101	<b>PPX:545-8101-4</b>	<b>PPX:500-5114-A</b>
English	<b>PPX:545-8101D</b>	
German	<b>PPX:545-8101F</b>	<b>PPX:505-5190</b>
French	<b>PPX:545-8101I</b>	<b>PPX:505-7190</b>
<b>System manuals for TI545/TI555</b>	<b>PPX:545-555-8101-2</b>	<b>PPX:505-8115-2</b>
CPU 1102, English	<b>PPX:545-8102</b>	on request
Documentation set TI545 (hardware, design, I/O programming), English		
<b>Technical product description for TI545</b>		
English	<b>PPX:545-8103-3</b>	
German	<b>PPX:545-8103-3D</b>	<b>PPX:505-7354</b>
French	<b>PPX:545-8103-3F</b>	<b>PPX:500-5053</b>
Italian	<b>PPX:545-8103-3I</b>	<b>PPX:500-5054</b>
<b>System manual for TI555, CPU</b>	<b>PPX:555-8101-2</b>	
English	<b>PPX:555-8101-1D</b>	<b>PPX:505-7339</b>
German	<b>PPX:555-8101-1F</b>	<b>PPX:505-7340</b>
französisch	<b>PPX:555-8101-1I</b>	<b>PPX:500-5039</b>
Italian		<b>PPX:500-5040</b>
<b>System manual for TI560T/TI565T, English</b>	<b>PPX:560-65-8109</b>	
<b>Programming manual for TI560T/TI565T</b>		
English	<b>PPX:560-65-8102</b>	
German <sup>1)</sup>	<b>PPX:560-65-8102D</b>	
French <sup>1)</sup>	<b>PPX:560-65-8102F</b>	
Italian <sup>1)</sup>	<b>PPX:560-65-8102I</b>	
<b>Product description for TI560T/TI565T</b>		
English	<b>PPX:560-65-8107</b>	<b>PPX:505-7112</b>
French	<b>PPX:560-65-8107F</b>	<b>PPX:505-7113</b>
Italian	<b>PPX:560-65-8107I</b>	<b>PPX:505-7114</b>
<b>User manual</b>	<b>PPX:560-65-8108</b>	
for redundant I/O, English		
<b>Controllers</b>		
<b>Controllers for expansion units</b>		
• I/O channel controller (IOCC) for TI535 <sup>2)</sup>		
• Distributed base controller (DBC) for TI535 <sup>3)</sup>		
• Remote channel controller (RCC), coaxial		
• Remote channel controller (RCC), RS 485 interface		
• Remote base controller (RBC), coaxial FM mode <sup>4)</sup>		
• Remote base controller (RBC), RS 485 interface <sup>4)</sup>		
• Remote base controller (RBC) for TI560T/565T, max. 4 km, coaxial		
• Remote base controller (RBC), for TI560T/565T, max. 1 km, RS 485		
• 505/6MT controller		
• 505/7MT controller		
<b>Manuals</b>		
• 7 MT interface adapter		
• 6 MT interface adapter		
<b>Communications modules</b>		
<b>Peerlink module,</b>		
Point-to-point link between 2 to 16 modules, mixed link between TI500 and TI505, with manual		
• for TI505, 2 redundant channels		
• for TI500, 1 channel		
• for TI500, 2 redundant channels		
<b>TIWAY communications processor NIM</b>		
with manual		
• 2 redundant interfaces (local line) for TI505		
• 2 redundant interfaces (RS232) for TI505		
• 2 redundant interfaces (local line) for TI500		
• 2 redundant interfaces (RS232) for TI500		
<b>UNLINK host adapter</b>		
with manual and PIM		
• 115 V AC, local line/local line TI-WAY interfaces, computer interfaces RS232C/423		
• 115 V AC, RS232C/RS232C TI-WAY interfaces, computer interfaces RS232C/423		
• 220 V AC, local line/local line TI-WAY interfaces, computer interfaces RS232C/423		
• 220 V AC, RS232C/RS232C TI-WAY interfaces, computer interfaces RS232C/423		

1) Available in Europe only.

2) TI535: additional IOCC in basic mounting rack.

3) TI535: DBC as interface in each expansion rack.

4) RBC as interface between CPU and RCC in expansion racks for 560T/565T.

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## Ordering data

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Ordering data 525 to 565	Order No.	Order No.
<b>Communications modules (continued)</b>		
<b>FIM fieldbus interface module, (with manual)</b> Connection with USS protocol (for SIMOVERT/SIMOREG drives), Profibus link (e.g. ET 200, S5-95U, drives), connection as for expansion rack (remote base)	<b>PPX:505-7202</b>	<b>I/O modules (continued)</b> <b>Digital input modules (cont.)</b>
<b>Industrial Ethernet module (NIM/Ethernet)</b> Point-to-point link via Layer 4, connection via TF functionality Layer 7, with manual	<b>PPX:505-CP1434TF</b>	<ul style="list-style-type: none"> <li>• 48/24 V DC, 16 inputs</li> <li>• 24 V AC, 8 inputs</li> <li>• 24 V AC, 16 inputs</li> <li>• 24 V AC, 32 inputs</li> <li>• 110 V AC, 8 inputs</li> <li>• 110 V AC, 16 inputs</li> <li>• 110 V AC, 32 inputs</li> <li>• 220 V AC, 8 inputs</li> <li>• 220 V AC, 16 inputs</li> <li>• 220 V AC, 32 inputs</li> <li>• 24 V DC isolated, 16/8 interrupt inputs</li> <li>• 48 V DC, isolated interrupts, 16 inputs/outputs</li> <li>• 125 V DC, isolated interrupts, 16 inputs/outputs</li> <li>• Simulation modules, 32 inputs</li> </ul>
<b>MODBUS NIM</b> 2 redundant interfaces, slave stations, with manual (English) and software	<b>PPX:505-5184</b>	<b>PPX:505-4316-A</b> <b>PPX:505-4008-A</b> <b>PPX:505-4016-A</b> <b>PPX:505-4032-A</b> <b>PPX:505-4208-A</b> <b>PPX:505-4216-A</b> <b>PPX:505-4232-A</b> <b>PPX:505-4408-A</b> <b>PPX:505-4416-A</b> <b>PPX:505-4432-A</b> <b>PPX:505-4317</b>
<b>RS485 coaxial converter</b> for connecting coaxial I/O to TI545/555/575	<b>PPX:505-6860</b>	<b>PPX:505-4318</b>
<b>TIWAY TAP</b> Distributor terminal for bus cable	<b>PPX:2703770-8001</b>	<b>PPX:505-4319</b>
<b>500 and 505 manual</b>	<b>PPX:500-8115</b>	<b>PPX:505-6010</b>
<b>Manuals for TIWAY modules</b> <ul style="list-style-type: none"> <li>• TI505 user description, English</li> <li>• TI500 user description, English</li> <li>• TI500 technical description, English</li> </ul>	<b>PPX:TIWAY-8124</b> <b>PPX:TIWAY-8110</b>	<b>PPX:505-4508</b>
<b>Manuals for UNILINK host adapter</b> <ul style="list-style-type: none"> <li>• Installation manual, English</li> <li>• User manual, English</li> <li>• TIWAY system, English</li> </ul>	<b>PPX:TIWAY-8119</b>	<b>PPX:505-3508</b>
<b>User for FIM,</b> German English French Italian	<b>PPX:505-8124-2D</b> <b>PPX:505-8124-3</b> <b>PPX:505-8124-2F</b> <b>PPX:505-8124-2I</b>	<b>PPX:505-4516</b>
<b>User for Industrial Ethernet,</b> German English French Italian	<b>PPX:505-8126-1D</b> <b>PPX:505-8126-2</b> <b>PPX:505-8126-1F</b> <b>PPX:505-8126-1I</b>	<b>PPX:505-3516</b>
<b>MODBUS NIM, English</b>	<b>PPX:505-8122-1</b>	<b>PPX:505-4532</b>
<b>I/O modules</b>		
<b>Digital input modules</b>		
<ul style="list-style-type: none"> <li>• 4 to 15 V DC, 8-point source/sink inputs</li> <li>• 4 to 15 V DC, 16-point source/sink inputs</li> <li>• 4 to 15 V DC, 32-point source/sink inputs</li> <li>• 24 V DC, 8-point source/sink inputs</li> <li>• 24 V DC, 32-point source/sink inputs</li> </ul>	<b>PPX:505-4108</b> <b>PPX:505-4116</b> <b>PPX:505-4132</b> <b>PPX:505-4308</b> <b>PPX:505-4332</b>	<ul style="list-style-type: none"> <li>• 115 V AC/DC, 4 A, 16 relay outputs</li> <li>• 24/110 V AC, 0.5 A, 8 outputs</li> <li>• 24/110 V AC, 0.5 A, 16 outputs</li> <li>• 24/110 V AC, 0.5 A, 32 outputs</li> <li>• 110/220 V AC, 1 A, 8 outputs</li> <li>• 110/220 V AC, 1 A, 16 outputs</li> <li>• 110/220 V AC, 1 A, 32 outputs</li> <li>• 220 V AC, 24 V DC, 2 A, 8 relay outputs</li> <li>• 220 V AC, 24 V DC, 2 A, 16 relay outputs</li> <li>• 220 V AC, 24 V DC, 2 A, 32 relay outputs</li> <li>• 220 V AC, 24 V DC, 5 A/3 A, 16 relay outputs</li> <li>• Simulation modules, 32 outputs</li> </ul>

Ordering data 525 to 565	Order No.	Order No.
<b>I/O modules (continued)</b>		
<b>Analog input module</b>	<b>PPX:505-6108-A</b>	<b>Special modules (continued)</b>
8-channel, 12 bits (0-5 V DC/±5V)		<b>Manual for counter module</b>
<b>Analog output module</b>	<b>PPX:505-6208-A</b>	with 2 counters, English
8-channel, 12 bits		with 6 counters, English
(0-10 V DC/0-20 mA)		
<b>Analog input/output modules</b>	<b>PPX:505-7012</b>	<b>Basic module</b>
• 8x15 bit input/4x12 bit output (mixed ranges) • 8x13 bit input/4x12 bit high-speed output (mixed ranges)		2 (RS232C/423) interfaces, memory 28 KB, transmission rate 110-19200 bps
<b>Parallel input/output modules</b>	<b>PPX:505-6308</b>	<b>Backup battery for basic module</b>
• 8-channel, multiplex TTL, 16-bit word inputs • 8-channel, multiplex TTL, 16-bit word inputs	<b>PPX:505-6408</b>	<b>EEPROM for basic program</b>
<b>User manual for digital I/O modules</b>	<b>PPX:505-8105-2</b>	<b>Manual</b>
<b>Manual for 505-4317 interrupt module</b>	<b>PPX:505-8123-1</b>	(supplied with module)
<b>Manual for analog I/O</b>	<b>PPX:505-8110-2</b>	<b>386/ATM module</b>
English	<b>PPX:505-8110-2D</b>	with CPU 30C286SX, RAM 4 MB, hard disk 120 MB, clock frequency 8 or 16 MHz, MS-DOS manual (English) and software
German	<b>PPX:505-8110-2F</b>	
French	<b>PPX:505-8110-2I</b>	
<b>Special modules</b>		<b>Manual</b>
<b>Thermocouple/RTD modules (with manual)</b>	<b>PPX:505-7028</b>	<b>Turbo plastic module</b>
• 8 inputs, -50 to +50 mV, thermocouples • 8 inputs, -50 to +50 mV, RTD • Calibration connector for RTD module	<b>PPX:505-7038</b>	5 analog inputs 0 to +5/0 to +10V DC
<b>User manual for thermocouple module</b>	<b>PPX:2587705-8009</b>	4 analog outputs, -10 to +10 V DC
English	<b>PPX:505-8111-3</b>	4 digital outputs, 15 to 24 V DC
German	<b>PPX:505-8111-2D</b>	
French	<b>PPX:505-8111-2F</b>	
Italian	<b>PPX:505-8111-2I</b>	
<b>User manual for RTD module</b>	<b>PPX:505-8114</b>	<b>Turbo parison module</b>
English	<b>PPX:505-8114-2D</b>	4 digital inputs/5 analog inputs
German	<b>PPX:505-8114-2F</b>	4 digital inputs/4 analog inputs
French	<b>PPX:505-8114-2I</b>	
Italian	<b>PPX:505-7002</b>	
<b>High-speed counter and encoding module</b>	<b>PPX:505-7003</b>	<b>Hot backup system</b>
2 counters, 4 inputs, 4 outputs, counter speed 50 kHz, 5 to 24 V DC, with manual		<b>560T hot backup system</b>
<b>High-speed counter and encoding module</b>		with 560/565T hot backup card, upgrade kit (PPX:560-2129-A) and: <ul style="list-style-type: none"><li>• 2 560T CPU (PPX:560T1KM-1101)</li><li>• 2 560T CPU (PPX:560T1KM-1102)</li><li>• 2 560T CPU (PPX:560T4KM-1101)</li><li>• 2 560T CPU (PPX:560T4KM-1102)</li><li>• 2 565T CPU (PPX:565T1KM-1101)</li><li>• 2 565T CPU (PPX:565T1KM-1102)</li><li>• 2 565T CPU (PPX:565T4KM-1101)</li><li>• 2 565T CPU (PPX:565T4KM-1102)</li></ul>
6 counters, 8 inputs, 8 outputs, counter speed 100 kHz, 5 to 24 V DC, with manual		<b>Manuals</b>
		<ul style="list-style-type: none"><li>• Hot backup installation instructions, English</li><li>• TI505 redundant I/O, English</li></ul>
		<b>PPX:560-65-8103-2</b>
		<b>PPX:505-8125-2</b>

# SIMATIC 505

## Ordering data

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Ordering data 525 to 565	Order No.	Order No.
<b>Spares for TI525 to TI555</b>		<b>Spares for 525 to 555 (continued)</b>
<ul style="list-style-type: none"> <li>• Connector: Side access (qty 1)</li> <li>• Connector: Front access (qty 1)</li> <li>• dummy plate (pack of 5)</li> <li>• Fuse holder for power supply (pack of 4)</li> <li>• Screws for dummy plate (pack of 10)</li> <li>• 505 RTD calibration connector</li> <li>• EEPROM for 525/535 for 545/555, 128 KB for 555, 256 KB</li> <li>• EPROM for 525/535 for CPU 545/555, 128 KB for 555, 256 KB</li> <li>• Backup battery for 525/535/545/650T/656T</li> <li>• Programming cable for 545</li> <li>• Memory expansion for 545-1101, 256 KB</li> <li>• Relay, 5 A, pack of 5</li> </ul>	<b>PPX:2587705-8010</b> <b>PPX:2587705-8011</b> <b>PPX:2587705-8003</b> <b>PPX:2587704-8001</b>  <b>PPX:2587705-8001</b>  <b>PPX:2587705-8009</b>  <b>PPX:2587681-8020</b> <b>PPX:2587681-8022</b> <b>PPX:2587681-8031</b>  <b>PPX:2587681-8012</b> on request <b>PPX:2587681-8030</b>  <b>PPX:2587678-8005</b>  <b>PPX:2601094-8001</b> <b>PPX:545-1111</b>  <b>PPX:2587704-8002</b>	<b>Fuses</b> <ul style="list-style-type: none"> <li>• Set, 3 A/125 V, pack of 5, for 505-45xx</li> <li>• Set, 3 A/250 V, pack of 5, for 505-48xx</li> <li>• Set, 3 A/250 V, pack of 5, for 505-46xx</li> <li>• Set, 3 A/250 V, pack of 5, for 505-6660</li> </ul>
		<b>PPX:2587679-8012</b> <b>PPX:2587679-8013</b> <b>PPX:2587679-8014</b> <b>PPX:2587679-8015</b>
		<b>Spares for TI560/565</b>
		<ul style="list-style-type: none"> <li>• 560T digital CPU</li> <li>• 565T special function CPU</li> <li>• 560T/565T power supply module, 110/220 V AC</li> <li>• 560T/565T power supply module, 24 V DC</li> <li>• Remote channel controller (RCC) (FM)</li> <li>• Remote channel controller (RCC) (RS 485)</li> <li>• Hot backup card</li> <li>• Hot backup upgrade kit (2 modules + cable)</li> <li>• Memory expansion module 64 K words</li> <li>• Memory expansion module 256 K words</li> <li>• Distributor box for 565T hot backup, tri splitter</li> <li>• Fiber-optic cable for 565 HBU</li> </ul>
		<b>PPX:560-2820</b> <b>PPX:565-2820</b> <b>PPX:560-2122</b>  <b>PPX:560-2123</b>  <b>PPX:560-2126-B</b>  <b>PPX:560-2127-B</b>  <b>PPX:560-2128-A</b> <b>PPX:560-2129-A</b>  <b>PPX:560-2130</b>  <b>PPX:560-2136</b>  <b>PPX:2587755-8001</b>  <b>PPX:2587693-8010</b>

Ordering data 575	Order No.	Order No.
<b>575 CPU</b> 832 KB	<b>PPX:575-2103</b>	
<b>System manual for 575</b>	<b>PPX:575-8101-4</b>	<b>PPX:VPU200-3605</b>
<b>575 user manual</b>	<b>PPX:575-8104-1</b>	
<b>Power supply modules (VME)</b>		
<ul style="list-style-type: none"> <li>• 115 V AC, 185 watts</li> <li>• 115/230 V AC, 300 watts</li> </ul>	<b>PPX:575-6660</b> <b>PPX:575-6663</b>	<b>PPX:2589739-8003</b> <b>PPX:2589739-8004</b>
<b>Interface for expansion unit (RCC)</b> Plug-in card in CPU 575	<b>PPX:575-2126</b>	<b>PPX:2589739-8005</b>
<b>Digital input module (VME)</b> with 32 inputs, 110 V AC	<b>PPX:575-4232</b>	<b>PPX:2589739-8014</b>
<b>Digital output module (VME)</b> with 16 outputs, 110 V AC	<b>PPX:575-4616</b>	<b>PPX:2589739-8015</b>
<b>Digital input/output module (VME)</b> with 16 I/O, 24 V DC	<b>PPX:575-4366</b>	<b>PPX:2589739-8001</b>
<b>Mounting rack (VME) 1.0"</b>		
<ul style="list-style-type: none"> <li>• with 9 slots</li> <li>• with 14 slots</li> <li>• with 16 slots</li> </ul>	<b>PPX:575-2124</b> <b>PPX:575-2128</b> <b>PPX:575-2130</b>	<b>PPX:2589739-8016</b>
<b>Coprocessor</b> (optional, Motorola 68882)	<b>PPX:2589739-8010</b>	<b>PPX:575-2131</b>  <b>PPX:2589739-8012</b>  <b>PPX:2589739-8011</b>  <b>PPX:2589739-8007</b> <b>PPX:2589739-8006</b> <b>PPX:2589739-8008</b>