

3.8" 5V GT-02 \$ 298 AIG02GQ02D \$ 298 AIG02MQ03D \$ 37 USB2.0-AMB10 \$ 53 AFC1500-US 5V: GT-02 Black, RS232 5V: GT-02 Silver, RS232 mini USB Programming cable PLC Communication cable	3.8" 24V GT-02 \$ 345 AIG02GQ12D \$ 345 AIG02MQ13D \$ 375 AIG02GQ22D \$ 375 AIG02MQ23D \$ 37 USB2.0-AMB10 \$ 53 AFC1500GTV2-US 24V: GT-02 Black, RS232 24V: GT-01 Silver, RS232 mini USB Programming cable PLC Communication cable	3.5" 24V GT-05 \$ 399 AIG05GQ02D \$ 549 AIG05SQ02D \$ 39 USB2.0-AB06 \$ 53 AFC1500GTV2-US 24V: GT-05, RS232 24V: GT-05, COLOR, RS232 USB Programming cable PLC Communication cable	4.6" 24V GT-12 \$ 525 AIG12GQ12D \$ 37 USB2.0-AMB10 \$ 53 AFC1500GTV2-US 24V: GT-12, RS232 mini USB Programming cable PLC Communication cable	4.7" 24V GT-21 \$ 744 AIGT2230B \$ 77 AFC1520M-US9 \$ 53 AFC1500GTV2-US 24V: GT-21, COLOR, RS232 RS232 Programming cable PLC Communication cable	5.7" 24V GT-32 \$ 597 AIG32MQ02D \$ 1064 AIG32TQ02D \$ 39 USB2.0-AB06 \$ 53 AFC1500GTV2-US 24V: GT-32, MONO, RS232 24V: GT-32, COLOR, RS232 USB Programming cable PLC Communication cable
--	---	---	--	---	--

GT Screen Protective Sheets (10 sheets in box): GT-02: AIG02800 GT-05: AIG05800 GT-12: AIG12800 GT-21: AIGT28021 GT32: AIG32800
 GT Screen battery (Real Time Clock function + GT Holding Registers): GT-02, GT-05, GT-12, GT-32: AFPX-BATT. GT-21: commercially available CR2032

Panasonic ideas for life

Canadian Office: 1 888 827 - 6628 Tech Support: 1 877 624 - 7872

Programming tools

PROGRAMMING SOFTWARE:	
\$ 497 FPWINPRO6-SMALL	PLC: FP0, FP0R, FPX, FP-E, FPG (no FP2)
\$ 233 AIGT8001V2	SCREENS: All GT screens
PROGRAMMING CABLES:	
\$ 77 AFC1520M-US9	PLC+HMI: RS232 port cable for all PLC
\$ 44 DV0P1960-US	SERVO: Minas A4 programming cable

FPX CPU and Exp

FPX CPU [AC120-240V]:

Relay 2A load:	Motion Function:
AFPX-C14R 8in, 6out.	1 axis 1x AFPX-PLS
AFPX-C30R 16in, 14out.	2 axis 2x AFPX-PLS
AFPX-C60R 32in, 28 out.	2 axis 2x AFPX-PLS
NPN 0.5A load:	Motion Function:
AFPX-C14T 8in, 6 out.	2x 100kHz + 1x 20kHz
AFPX-C30T 16in, 14 out.	2x 100kHz + 2x 20kHz
AFPX-C60T 32in, 28 out.	2x 100kHz + 2x 20kHz
PNP 0.5A load:	Motion Function:
AFPX-C14P 8in, 6 out.	2x 100kHz + 1x 20kHz
AFPX-C30P 16in, 14 out.	2x 100kHz + 2x 20kHz
AFPX-C60P 32in, 28 out.	2x 100kHz + 2x 20kHz

FPX EXPANSIONS:

Relay 2A load:	NPN 0.5A load:
AFPX-E16R 8in, 8 out (No power supply)	AFPX-E16T 8in, 8 out (No power supply)
AFPX-E14YR 14 out (No power supply) NEW !!!	AFPX-E30T 16in, 14 out
AFPX-E30R 16in, 14 out	PNP 0.5A load:
	AFPX-E16P 8in, 8 out (No power supply)
	AFPX-E30 16in, 14 out

Warning: 2pcs of FPX-E16 can't be installed side by side.
 AFPX-E30 must be used instead.

FP-X

\$ 753 **AFPX-C60R [USB]**

\$ 469 **AFPX-C30R [USB]**

\$ 125 **AFPX-C14R**

AFPX-BATT Battery: used with FPX + GT HMI. Enables retaining variables

HIGH SPEED COUNTER INPUTS	Relay output Single phase: 10kHz x 8
	Relay output Quadrature: 5kHz x 4
	Trans Single phase: 50kHz x 4 + 10kHz x 4
	Trans Quadrature: 25kHz x 2 + 5kHz x 2

FPX COMMUNICATION CASSETTES:

WX30, WX40 - WX100 X300, X400 - X1000

WX3, WX32, WX34 X300, X320, X340

Upper Slot 1 Slot 2

Lower Slot 1 Slot 2

Communication cassettes only

App cassettes addresses WX10-11 WX20-21 X100 X200

FPX APPLICATION CASSETTES:

Mountable only on lower level of Slot 1 and Slot 2

Analogue signals:

AFPX-AD2 2in: 0-10V, 4-20mA

AFPX-A21 2in: 0-5V, 0-10V, 4-20mA, 1out: 0-10V, 4-20mA

AFPX-DA2 2out: 0-10V, 4-20mA

AFPX-TC2 2in: T/C J-K (max 500 deg C)

AFPX-RTD2 2in: PT100 **NEW !!!**

Digital signals:

AFPX-IN4T3 4in: NPN-PNP, 3out: NPN

AFPX-IN8 8in: NPN-PNP

AFPX-TR8 8out: NPN

AFPX-TR6P 6out: PNP

Advanced:

AFPX-PLS 1 axis motion output: 1x 100kHz or 2x 80kHz. HSC: 2ch 80kHz, 1quad 30kHz. **Relay PLC only**

AFPX-MRTC Master Memory: Program backup + Real Time Clock needs battery **AFPX-BATT**

FPX COMMUNICATION CASSETTES:

Mountable on Lower or Upper level of Slot 1

AFPX-COM1 RS232

AFPX-COM2 RS232 + RS232

AFPX-COM3 RS485/422

AFPX-COM4 RS485 + RS232

AFPX-COM5 ETHERNET + RS232

AFPX-COM6 RS485 + RS485

Warnings:

* AFPX-C30R and AFPX-C60R RS232C tool port and USB port cannot be used simultaneously.

** Maximum of 1 communication cassette can be used.

PC Link - PLC to PLC communication data sharing

RS485/16 stations / 115.2 kbps / 1200 m 3937 ft

1 and 2 axis system

24VDC HMI

AFC1500GTV2-US

24V: GT-12, RS232

24V: GT-05, COLOR, RS232

5VDC HMI

AFC1500-US

FPG-C32T2H 16in, 16 NPN out (up to 2 Axis)

1 Axis cable: DV0P0980W-1

2 Axis cable: DV0P0981W-1

A4 Servo Parameters & Electronic Gearing

Servo Parameters: 01=1(speed) 2(Torque), 02=0(Position), 21=1-7 (Real Time Tuning)

22= 1-14 (Stiffness), 42=3 (Pulse+sign), 5E=0-300 (Torque Limit)

Command pulse f

1st numerator (Pr48) x 2

Multiplier (Pr4A)

Denominator (Pr4B)

Internal command F

Drive Motor to Drive Wiring Info: Red White Black

Minas A4 Servo

Minas A4 Servo options	Part Number	Rated Nm	Peak Nm
200W 100VAC, 1PH	MSMD021P1S MBDDT2110003 MFCA0030EED MFCA0030EAM	0.64	1.91
200W 200VAC, 3PH	MSMD022P1S MADDT1207003 MFCA0030EED MFCA0030EAM	0.64	1.91
400W 100VAC, 1PH	MSMD041P1S MCDT3120003 MFCA0030EED MFCA0030EAM	1.3	3.8
400W 200VAC, 3PH	MSMD042P1S MBDDT2210003 MFCA0030EED MFCA0030EAM	1.3	3.8
400W Flat 100VAC, 1PH	MQMA041P1S MCDT3120003 MFCA0030EED MFCA0030EAM	1.3	3.8
750W 200VAC, 1 or 3PH	MSMD082P1S MCDT3520003 MFCA0030EED MFCA0030EAM	2.4	7.1
1kW 200VAC, 1 or 3PH	MSMA102P1G MDDDT5540003 MFCD0032ECD MFCA0030ESD	3.18	9.5
1.5kW 200VAC, 1 or 3PH	MSMA152P1G MDDDT5540003 MFCD0032ECD MFCA0030ESD	4.77	14.3
2kW 200VAC, 3PH	MSMA202P1G MEDDT7364003 MFCD0032ECT MFCA0030ESD	6.36	19.1
3kW 200VAC, 3PH	MSMA302P1G MFDDTA390003 MFCA0033ECT MFCA0030ESD	9.54	28.6
4kW 200VAC, 3PH	MSMA402P1G MFDDTB3A2003 MFCA0033ECT MFCA0030ESD	12.6	37.9
5kW 200VAC, 3PH	MSMA502P1G MFDDTB3A2003 MFCA0033ECT MFCA0030ESD	15.8	47.6

External Relay Module

RT3S-24V
RT3SP1-24V

AY1505-US
AYT58403

4 point pow relay terminal, 2A/pt, 24Vdc PWR. Relays are included.
 4 point relay, Photomos relay terminal 2A/pt., 24Vdc. Relays are included.
 Open ends I/O cable 8 pins. Inputs or outputs, 0.5m
 Open ends I/O cable 32 pins. Inputs or outputs, 1m

FP0R / FP Sigma

FP0R CPU [DC24V] USB + 4 axis [50kHz]:

Relay 2A load:

AFP0RC10RS 6in, 4 out RS232

AFP0RC10CRS 6in, 4 out RS485

AFP0RC10MRS 6in, 4 out RS232

AFP0RC14RS 8in, 6 out RS232

AFP0RC14CRS 8in, 6 out RS485

AFP0RC14MRS 8in, 6 out RS485

NPN 0.2A load:

AFP0RC16T 8in, 8 out 3 axis: 50kHz

AFP0RC16CT 8in, 8 out RS232 3 axis: 50kHz

AFP0RC16MT 8in, 8 out RS485 3 axis: 50kHz

AFP0RC32T 16in, 16 out 4 axis: 50kHz

AFP0RC32CT 16in, 16 out RS232 4 axis: 50kHz

AFP0RC32MT 16in, 16 out RS485 4 axis: 50kHz

AFP0RT32CT 16in, 16 out RS232 4 axis: 50kHz

AFP0RT32MT 16in, 16 out RS485 4 axis: 50kHz

AFP0RF32CT 16in, 16 out RS323 4 axis: 50kHz

AFP0RF32MT 16in, 16 out RS485 4 axis: 50kHz

PNP 0.2A load:

AFP0RC16P 8in, 8 out 3 axis: 50kHz

AFP0RC16CP 8in, 8 out RS232 3 axis: 50kHz

AFP0RC16MP 8in, 8 out RS485 3 axis: 50kHz

AFP0RC32P 16in, 16 out 4 axis: 50kHz

AFP0RC32CP 16in, 16 out RS232 4 axis: 50kHz

AFP0RT32CP 16in, 16 out RS485 4 axis: 50kHz

AFP0RT32MP 16in, 16 out RS232 4 axis: 50kHz

AFP0RF32CP 16in, 16 out RS323 4 axis: 50kHz

AFP0RF32MP 16in, 16 out RS485 4 axis: 50kHz

FP0 EXPANSIONS [DC24V]:

Analogue:

FP0-A21 2in: T/C J+K, 0-5V, 0-10V, 4-20mA
 1out: 0-10V, 4-20mA

FP0-A21T26 2in: 0-5V, 0-10V, 4-20mA

FP0-A80 8in: 0-5V, +/-10V (100mV), 4-20mA

FP0-RTD6 6in: RTD

FP0-TC4 4in: T/C J+K (max 500 deg C)

FP0-TC8 8in: T/C J+K (max 500 deg C)

FP0-A04V 4out: 0-10V

FP0-A04I 4out: 4-20mA

Inputs only [NPN-PNP]:

FP0-E8X 8in AFP0RE8X

FP0-E16X 16in AFP0RE16X

Relay 2A load:

FP0-E8RS 4in, 4 out AFP0RE8RS

FP0-E8YRS 8in, 8 out AFP0RE8YRS

FP0-E16RS 8in, 8 out AFP0RE16RS

NPN 0.2A load:

FP0-E8YT 8 out AFP0RE8YT

FP0-E16T 8in, 8 out AFP0RE16T

FP0-E16YT 16 out AFP0RE16YT

FP0-E32T 16in, 16 out AFP0RE32T

PNP 0.2A load:

FP0-E8YP 8 out AFP0RE8YP

FP0-E16P 8in, 8 out AFP0RE16P

FP0-E16YP 16 out AFP0RE16YP

FP0-E32P 16in, 16 out AFP0RE32P

FPsigma CPU [DC24V]:

WX34 [X340] WX26 [X260] WX18 [X180] WX10 [X100] WX0 [X0] WX2 [X20] WX4 [X40] WX6 [X60]

Relay 2A load:

FPG-C24R2H 16in, 8 out

FPG-C24R2HTM 16in, 8 out + 2 Thermistor in

NPN 0.1A load:

FPG-C32T2H 16in, 16 out + 2-axis 60kHz

FPG-C32T2HTM 16in, 16 out, + 2-axis 60kHz + 2 Thermistor

PNP 0.1A load:

FPG-C28P2H 16in, 12 out + 2-axis 60kHz

FPG-C28P2HTM 16in, 12 out, + 2-axis 60kHz + 2 Thermistor

FPsigma EXPANSIONS [DC24V]:

FPG-XY64D2T 32in, 32 NPN out

FPG-XY64D2P 32in, 32 PNP out

FPG-PP11 1 axis motion 500 kHz

FPG-PP12 1 axis motion Line Driver 4 MHz

FPG-PP21 2 axis motion 500 kHz

FPG-PP22 2 axis motion Line Driver 4 MHz

FPG-PN2AN 2 axis motion RTEK, Ethernet

FPG-PN4AN 4 axis motion RTEK, Ethernet

FPG-PN8AN 8 axis motion RTEK, Ethernet

FPG-FNS Flexible Network Slave

FPG-EM1 256k Data Memory

FPsigma COMMUNICATION CASSETTES:

FPG-COM1 RS232

FPG-COM2 RS232 + RS232

FPG-COM3 RS485/422

FPG-COM4 RS485 + RS232

FP sigma Battery: AFPG804
 Enables additional retaining variables