

	DL405 CPUs	Aust\$
D4-450	D4-450 CPU, 30.8K words total memory. 7.5K flash ladder memory on board or use optional memory cartridge for up to 15.5K ladder (RAM, UVPR0M, or EEPROM cartridges available). RLL/RLLPLUS programming including support for up to 16 PID loops and floating point math. Built-in communication ports including an RS232C programming port and auxiliary RS232C/RS422 ports. Internal 110/220 VAC power supply (memory cartridge is optional). NOTE: If the D4-450 is replacing a CPU in an existing system, and the system has specialty modules with an F4 part number, (CoPros, SDN, etc.) please contact our Technical Services group before ordering. These modules may require an upgrade to operate with the D4-450. (Does not apply to analog modules.)	\$1,690
D4-450DC-1	D4-450DC-1 CPU, 30.8K words total memory. 7.5K flash ladder memory on board or use optional memory cartridge for up to 15.5K ladder (RAM, UVPR0M, or EEPROM cartcartridges available). RLL/RLLPLUS programming, with support for up to 16 PID loops and floating point math. Built-in comm ports including an RS232C programming port and auxiliary RS232C/RS422 ports, internal 24 VDC power supply (memory cartridge is optional).	\$1,790
D4-450DC-2	D4-450DC-2 CPU, 30.8K words total memory. 7.5K flash ladder memory on board or use optional memory cartridge for up to 15.5K ladder (RAM, UVPR0M, or EEPROM cartcartridges available). RLL/RLLPLUS programming, with support for up to 16 PID loops and floating point math. Built-in comm ports including an RS232C programming port and auxiliary RS232C/RS422 ports, internal 125 VDC power supply (memory cartridge is optional).	\$1,890
D4-440	D4-440 CPU, 22.5K words total memory, (15.5K ladder - RAM, UVPR0M, or EEPROM , 7.0K V-memory) RLL/RLLPLUS programming, built-in RS232C programming port and auxiliary RS232C/RS422 port, internal 110/220 VAC power supply (requires memory cartridge)	\$1,390
D4-440DC-1	D4-440DC-1 CPU, 22.5K words total memory, (15.5K ladder - RAM, UVPR0M, or EEPROM , 7.0K V-memory) RLL/RLLPLUS programming, built-in RS232C programming port and auxiliary RS232C/RS422 port, internal 24 VDC power supply (requires memory cartridge)	\$1,490
D4-440DC-2	D4-440DC-2 CPU, 22.5K words total memory, (15.5K ladder - RAM, UVPR0M, or EEPROM , 7.0K V-memory) RLL/RLLPLUS programming, built-in RS232C programming port and auxiliary RS232C/RS422 port, internal 125 VDC power supply (requires memory cartridge)	\$1,490
D4-430	D4-430 CPU, 6.5K words total memory, (3.5K ladder - EEPROM, 3.0K V-memory), RLL/RLLPLUS programming, built-in RS232C programming port and aux RS232C/422 port, internal 110/220 VAC power supply (memory cartridge cannot be used to expand memory).	\$1,290
D4-USER-M	DL405 CPUs, bases, memory and discrete I/O modules are covered in the DL405 User Manual. Order manual separately.	\$80
	DL405 Memory Cartridges	
D4-RAM-1	CMOS RAM cartridge with battery, maximum program storage 7.5K	\$250
D4-RAM-2	CMOS RAM cartridge with battery, maximum program storage 15.5K	\$390
D4-UV-2	UVPR0M cartridge, maximum program storage 15.5K	\$250
D4-EE-2	EEPROM cartridge, maximum program storage 15.5K	\$325
D4-MC-BAT	CMOS RAM Cartridge replacement battery	\$40
	DL405 Expansion Units and Cables	
D4-EX	Local base expansion unit, includes 110/220 VAC power supply, requires local I/O expansion cable D4-EXCBL-1 or D4-EXCBL-2	\$395
D4-EXDC	Local base expansion unit, includes 24 VDC power supply, requires local I/O expansion cable D4-EXCBL-1 or D4-EXCBL-2	\$390
D4-EXDC-2	Local base expansion unit, includes 125 VDC power supply, requires local I/O expansion cable D4-EXCBL-1 or D4-EXCBL-2	\$390
D4-EXCBL-1	Base expansion cable, 3.08 ft. (1m)	\$120
D4-EXCBL-2	Base expansion cable, 1.54 ft. (0.5m)	\$120
	DL405 I/O Bases	
D4-04B-1	4-slot local or expansion base; allows specialty modules in expansion bases when used with D4-450 CPU.	\$275
D4-06B-1	6-slot local or expansion base; allows specialty modules in expansion bases when used with D4-450 CPU.	\$330
D4-08B-1	8-slot local or expansion base; allows specialty modules in expansion bases when used with D4-450 CPU.	\$390
	DL405 DC Input Modules	
D4-08ND3S	8-point input module 24-48 VDC, sink/source, 8 commons (Isolated), removable terminal	\$195
D4-16ND2	16-point 12-24 VDC current sourcing input module, 2 commons (isolated), removable terminal	\$240
D4-16ND2F	16-point 12-24 VDC current sourcing input module, fast response (1 ms), 2 commons (isolated), removable terminal	\$270
D4-32ND3-1	32-point 24 VDC current sinking/sourcing input module, 4 commons (isolated). Requires one connector, sold separately. NOTE: Recommended pre-wired Ziplink connector cable for this I/O Module is part number ZL-4CBL4#; where # designates either 0.5, 1, or 2 meter cable lengths. Accessory cable connector module for ZL-4CBL4# cable is part number ZL-CM40. (Or build a custom cable with D4-IO3264R, D4-IO3264S or D4-IOCBL-1.)	\$340
D4-32ND3-2	32-point 5-12 VDC sinking/sourcing input module, 4 commons (isolated). Requires one connector, sold separately. NOTE: Recommended pre-wired Ziplink connector cable for this I/O Module is part number ZL-4CBL4#; where # designates either 0.5, 1, or 2 meter cable lengths. Accessory cable connector module for ZL-4CBL4# cable is part number ZL-CM40. (Or build a custom cable with D4-IO3264R, D4-IO3264S or D4-IOCBL-1.)	\$340
D4-64ND2	64-point 20-28 VDC sourcing input module, 8 commons (isolated). Requires two connectors, sold separately. NOTE: Recommended pre-wired Ziplink connector cable for this I/O Module is part number ZL-4CBL4#; where # designates either 0.5, 1, or 2 meter cable lengths. Accessory cable connector module for ZL-4CBL4# cable is part number ZL-CM40. (Or build a custom cable with D4-IO3264R, D4-IO3264S or D4-IOCBL-1.)	\$580

DL405 AC Input Modules		
D4-08NA	8-point 110-220 VAC input module, 2 commons (isolated), removable terminal	\$220
D4-16NA	16-point 110 VAC input module, 2 commons (isolated), removable terminal	\$320
D4-16NA-1	16-point 220 VAC input module, 2 commons (isolated), removable terminal.	\$320
DL405 AC/DC Input Modules		
D4-16NE3	16-point 12-24 VAC/DC current sinking/sourcing input module, 2 commons (isolated), removable terminal	\$250
F4-08NE3S	8-point 90-150 VAC/DC current sinking/sourcing isolated input module, 8 commons, removable terminal	\$360
DL405 DC Output Modules		
D4-08TD1	8-point 12-24 VDC current sinking output module, 2 commons (internally connected), 2A/point, 5A/common, removable terminal	\$270
F4-08TD1S	8-point 24-150 VDC current sinking isolated output module, 4 commons (isolated), 2A/point, 12A/module, removable terminal	\$475
D4-16TD1	16-point 5-24 VDC current sinking output module, 2 commons (internally connected), 0.5A/point, 3A/common, removable terminal	\$323
D4-16TD2	16-point 12-24 VDC current sourcing output module, 2 commons (isolated), 0.5A/point, 3A/common, removable terminal	\$323
D4-32TD1	32-point 5-26 VDC current sinking output module, 4 commons (isolated), 0.2A/point, 1.6A/common. Requires one connector, sold separately. NOTE: Recommended pre-wired Ziplink connector cable for this I/O Module is part number ZL-4CBL4#, where # designates either 0.5, 1, or 2 meter cable lengths. Accessory cable connector module for ZL-4CBL4# cable is part number ZL-CM40. (Or build a custom cable with D4-IO3264R, D4-IO3264S or D4-IOCBL-1.)	\$395
D4-32TD1-1	32-point 5-15 VDC current sinking output module, REVERSE LOGIC, 4 commons (isolated), 0.09A/point, 0.72A/common. Requires one connector, sold separately. NOTE: Recommended pre-wired Ziplink connector cable for this I/O Module is part number ZL-4CBL4#, where # designates either 0.5, 1, or 2 meter cable lengths. Accessory cable connector module for ZL-4CBL4# cable is part number ZL-CM40. (Or build a custom cable with D4-IO3264R, D4-IO3264S or D4-IOCBL-1.)	\$355
D4-32TD2	32-point 12-24 VDC current sourcing output module, 4 commons (isolated), 0.2A/point, 1A/common. Requires one connector, sold separately. NOTE: Recommended pre-wired Ziplink connector cable for this I/O Module is part number ZL-4CBL4#, where # designates either 0.5, 1, or 2 meter cable lengths. Accessory cable connector module for ZL-4CBL4# cable is part number ZL-CM40. (Or build a custom cable with D4-IO3264R, D4-IO3264S or D4-IOCBL-1.)	\$420
D4-64TD1	64-point 5-24 VDC current sinking output module, 8 commons (isolated). Requires two connectors, sold separately. NOTE: Recommended pre-wired Ziplink connector cable for this I/O Module is part number ZL-4CBL4#, where # designates either 0.5, 1, or 2 meter cable lengths. Accessory cable connector module for ZL-4CBL4# cable is part number ZL-CM40. (Or build a custom cable with D4-IO3264R, D4-IO3264S or D4-IOCBL-1.)	\$594
DL405 AC Output Modules		
D4-08TA	8-point 18-220 VAC output module, 2 commons (isolated), 2A/point, 5A/common, removable terminal	\$390
D4-16TA	16-point 18-220 VAC output module, 2 commons (isolated), 0.5A/point, 3A/common, removable terminal	\$450
DL405 Relay Output Modules		
D4-08TR	8-point 5-30 VDC or 5-250 VAC output module, 8 Form A (SPST) relays, 2 commons (isolated), 2A/point, 5A/common, removable terminal	\$275
F4-08TRS-1	8-point 12-30 VDC or 12-250 VAC isolated output module, 4 Form A (SPST) and 4 Form C (SPDT) relays, 8 commons (isolated), 10A/point, 40A/module, removable terminal.	\$295
F4-08TRS-2	8-point 12-30 VDC or 12-250 VAC isolated output module, 4 Form A (SPST) relays and 4 Form C (SPDT) relays, 8 commons (isolated), 5A/point, 40A/module, replaceable fuses, removable terminals.	\$350
D4-16TR	16-point 5-30 VDC or 5-250 VAC output module, 16 Form A (SPST) relays, 2 commons (isolated), 1A/point, 5A/common, removable terminals.	\$395

DL405 Analog Modules		
F4-04AD	4-channel analog input module, 12 bit resolution, ranges: 0 - 5V, -5V to +5V, 1 - 5V, 0 - 10V, -10V to +10V, 4 - 20 mA, 0 - 20 mA.	\$695
F4-04ADS	4-channel isolated analog input module, 12 bit resolution, ranges: 0 - 5V, 0 - 10V, 1 - 5V, -5V to +5V, -10V to +10V, 0 - 20mA, 4 - 20mA.	\$940
F4-08AD	8-channel analog input module, 12 bit resolution, ranges: 4 to 20mA, 1 to 5V, 0 to 20mA, 0 to 5V, 0 to 10V, -5V to +5V, -10V to +10V.	\$790
F4-16AD-1	16-channel analog input module, 12 bit resolution, range: 4 to 20mA.	\$960
F4-16AD-2	16-channel analog input module, 12 bit resolution, ranges: 0-5V, 0-10V.	\$960
F4-04DA-1	4-channel analog output module, 12 bit resolution, range: 4 to 20mA.	\$570
F4-04DA-2	4-channel analog output module, 12 bit resolution, ranges: 0 to 5V, 0 to 10V, -5V to +5V, -10V to +10V.	\$590
F4-04DAS-1	4-channel analog output module, 16 bit resolution, isolated, range: 4 to 20mA current sourcing.	\$870
F4-04DAS-2	4-channel analog output module, 16 bit resolution, isolated, range: 0-5V, 0-10V.	\$890
F4-08DA-1	8-channel analog output module, 12 bit resolution, range: 4 to 20mA.	\$890
F4-08DA-2	8-channel analog output module, 12 bit resolution, range: 0-5V or 0-10V.	\$890
F4-16DA-1	16-channel analog output module, 12 bit resolution, range: 4 to 20mA.	\$995
F4-16DA-2	16-channel analog output module, 12 bit resolution, range: 0-5V or 0-10V.	\$1,120
DL405 temperature input modules		
F4-08THM	8-channel differential thermocouple module, built-in cold junction compensation, linearization, and burn-out indication. .1°C resolution. Can replace all other THM modules; thermocouple type selection is set by jumpers (supports J, E, K, R, S, T, B, N, C). Also supports 0-5VDC, -5 to +5VDC, 0-156mVDC, -156 to +156mVDC at 16-bit resolution.	\$995
F4-08THM-J	J type 8-channel differential thermocouple module, built-in cold junction compensation, linearization, and burn-out indication. Direct indication in degrees C or degrees F over the full range. (Additional thermocouple types and millivolt ranges available as special order.)	\$1,290
F4-08THM-K	K type 8-channel differential thermocouple module, built-in cold junction compensation, linearization, and burn-out indication. Direct indication in degrees C or degrees F over the full range. (Additional thermocouple types and millivolt ranges available as special order.)	\$1,290
F4-08RTD	8-channel RTD input module, 0.1 degree C resolution, supports: Pt100, jPT100, Cu10, Cu25, and Pt1000.	\$750
D4-ANLG-M	All DL405 Analog I/O modules, including the Thermocouple Input, are covered in the DL405 Analog I/O Manual. Order separately.	\$60
DL405 Remote I/O		
H4-ERM	Ethernet Remote Master Module, master Ethernet remote I/O on a 10Base-T network at 10 Megabaud, cable not included. Can be installed in a local base, with a D4-430, D4-440 or D4-450 in the CPU location, or in a local expansion base (D4-450 based system only). Ethernet cable connects to H2/4-EBCs directly or via Ethernet hub(s).	\$590
H4-ERM-F	Ethernet Remote Master Module, master Ethernet remote I/O on a Fiber Optic network at 10 Megabaud, cable not included. Can be installed in a local base, with a D4-430, D4-440 or D4-450 in the CPU location, or in a local expansion base (D4-450 based system only). Ethernet cable connects to H2/4-EBC-Fs directly or via Ethernet hub(s).	\$990
H4-EBC	Ethernet Base Controller for DL405 Base, supports discrete and analog I/O only. 10Base-T connections to PC-based controllers supporting IP/IPX protocol.	\$990
H4-EBC-F	Ethernet Base Controller for DL405 Base, supports discrete and analog I/O only. Fiber Optic connections to PC-based controllers supporting IP/IPX protocol.	\$990
DL405 serial remote I/O modules		
D4-RM	Serial remote I/O master module, remote I/O system is one master (D4-RM) and up to seven slaves (D4-RS) non-removable terminals, uses shielded twisted pair (24 AWG minimum)	\$890
D4-RS	Serial remote I/O slave unit (used with D4-RM), includes 110/220 VAC power supply, uses shielded twisted pair (24 AWG minimum)	\$990
D4-RSDC	Serial remote I/O slave unit (used with D4-RM), includes 24 VDC power supply, uses shielded twisted pair (24 AWG minimum)	\$990
D4-REMIO-M	DL405 serial remote I/O components are covered in the DL405 Remote I/O Manual. Order separately.	\$60

DL405 Communications and Networking		
H4-ECOM	Ethernet Communication Module, master/slave on a Ethernet 10Base-T network at 10 Megabaud, cable not included.	\$790
H4-ECOM-F	Ethernet Communication Module, master/slave on an Ethernet Fiber Optic network at 10 Megabaud, cable not included.	\$990
H4-ECOM100	DL405 PLC Systems Ethernet Communications Module, 10/100 Mbit with auto-detect, supports TCP/IP, UDP/IP, IPX & Modbus TCP application layer protocol	\$810
DL405 serial communications module		
D4-DCM	Data Communication Module, master/slave on a Direct NET Network, slave on a Modbus RTU Network, RS232C/RS422 communications, cable not included.	\$730
D4-DCM-M	DL405 Data Communication Manual. Order manual separately.	\$60
DL405 Modbus master module		
F4-MAS-MB	Modbus Network Master module, Modbus RTU Protocol, provides block read/write and high speed table driven polling, up to 115,200 baud, cable not included.	\$890
F4-MASMB-M	Modbus Master Manual. Order separately.	\$20
DL405 CoProcessors		
F4-CP128-1	Overdrive CoProcessor (tm) module, 128K battery backed RAM, 26Mhz clock, Port 1: RS232C/RS422/RS485 (115.2K baud max.), Port 2: RS232C/RS422/RS485 (57.6K baud max.), Port 3: RS232C (19.2K baud max.) uses unused RTS/CTS lines from Port 1. Commander programming software for Windows included on CD-ROM.	\$890
F4-CP128-R	Not recommended for new development. CoProcessor (tm) module, 128K battery backed RAM, 16Mhz clock, Port 1: RS232C/RS422/RS485 (115.2K baud max.), Port 2: 300/1200/2400 baud radio modem, Port 3: RS232C (9600 K baud max.) uses unused RTS/CTS lines from Port 1. Commander programming software for Windows included on CD-ROM.	\$1,290
F4-CP512-1	Not recommended for new development. Overdrive CoProcessor (tm) module, 512K battery backed RAM, 26Mhz clock, Port 1: RS232C/RS422/RS485, maximum baud 115.2K, Port 2: RS232C/RS422/RS485, maximum baud 19.2K, Port 3: RS232C, maximum baud 9600 uses unused RTS/CTS lines from Port 1. Commander programming software for Windows included on CD-ROM.	\$1,290
F4-CP128-T	Overdrive CoProcessor (tm) module, 128K battery backed RAM, 16Mhz clock, Port 1: RS232C/RS422/RS485, maximum baud 115.2K, Port 2: RS232C or full-duplex, 300/1200/2400 baud telephone modem, Port 3: RS232C, maximum baud 9600 on unused RTS/CTS lines from Port 1. Commander programming software for Windows included on CD-ROM.	\$1,550
F4-CP-M	CoProcessor manual, packaged with FA-BASIC-M manual. Order separately.	\$60
DL405 Specialty Modules		
DL405 PID module		
F4-16PID	PID CoProcessor module, 16 loops, sample rates to 0.1 sec. position/velocity, alarming (configure with DirectSOFT)	\$790
F4-16PID-M	DL405 PID CoProcessor manual. Order separately.	\$20
DL405 temperature controller module		
F4-4LTC	4-loop Temperature Controller, 4 independent temperature loops, RTD or thermocouple inputs (jumper selectable) and solid-state relay outputs. Includes (1) F4-CT current transformer.	\$990
F4-4LTC-M	DL405 4-loop Temperature Controller manual. Order separately.	\$20
F4-CT	Current Transformer for use with F4-4LTC to detect heater burnout.	\$45
DL405 magnetic pulse input module		
F4-8MPI	Magnetic Pulse Input Module, 8-point direct input from magnetic pickups, flow totalization, instantaneous flow rate, indicated volume and gross volume calculations in engineering units. K factor and other parameters stored in non-volatile V-memory.	\$990
F4-8MPI-M	DL405 Magnetic Pulse Input Manual. Order separately.	\$20
DL405 interrupt input module		
D4-INT	8-point Interrupt Input Module, provides up to 8 prioritized hardware interrupts to the CPU (.067 ms/pt.), inputs not used for interrupts can be used as normal inputs.	\$230
D4-INTR-M	DL405 Interrupt Input Manual. Order separately.	\$60
DL405 High Speed Counter modules		
H4-CTRIO	DL405 High Speed Counter I/O Module, 8 DC sink/source inputs 9-30VDC, 4 isolated sink/source DC outputs, 5-30VDC, 1A per point. Inputs supported: 2 quadrature encoder counters up to 100kHz, or 4 single channel counters up to 100kHz, and 4 high speed discrete inputs for Reset, Inhibit, or Capture. Outputs supported: 4 independently configurable high speed discrete outputs or 2 channels pulse output control, 20Hz-25kHz per channel, pulse and direction or cw/ccw pulses.	\$720
DL405 counter I/O module		
D4-HSC	High Speed Counter module, quadrature or incrementing/decrementing counter encoding, 7 control inputs, 4 control outputs, count rates to 100kHz and has rate function.	\$990
D4-HSC-M	High Speed Counter Manual for D4-HSC. Order separately.	\$60
DL405 simulator module		
D4-16SIM	8/16-point (selectable) input simulator module, for program development/debug. Covered in DL405 User Manual.	\$395
D4-INST-M	DL405 Installation and I/O Manual. Covers installation and wiring, plus specifications of all discrete I/O modules.	\$60

DL405 Programming		
D4-HPP-1	RLLPLUS handheld programmer, provides programming, testing and monitoring for all DL405 CPUs, including the D4-450 CPU.	\$890
D4-HPCBL-1	DL405 handheld programmer extension cable, 9.24 ft. (3m)	\$145
D4-HPCBL-2	Handheld programmer extension cable 4.6ft. (1.5m)	\$145
D4-CASCBL	Cassette Interface cable for D4-HPP-1 (DL405 handheld programmer)	\$70
D4-HP-M	DL405 Handheld Programmer manual. Order separately.	\$60
DL405 Spare Parts and Accessories		
D4-ACC-1	CPU screw/cover kit. Contains 10 spare screws for power strip terminals, 2 power strip terminal jumpers, and plastic covers for the power strip terminals, 15-pin top port, and 25-pin bottom port.	\$40
D4-ACC-2	Spare terminal screws for DL405 8-point I/O modules (quantity 16)	\$40
D4-ACC-3	Spare terminal screws for DL405 16-point I/O modules (quantity 16)	\$40
D4-CPUKEY	Spare Keys for all DL405 CPU & D3-HP/HPP, date code 0338 and newer (quantity 2)	\$30
D4-FUSE-2	10A spare fuses for F4-08TRS-2 (quantity 5)	\$40
D4-8IOCON	8-point I/O module terminal blocks (quantity 5)	\$95
D4-16IOCON	16-point I/O module terminal blocks (quantity 5)	\$175
D4-IOCVR	I/O module plastic covers (quantity 5)	\$20
D4-FILL	Filler module, used to cover empty base slots	\$40
D4-IO3264S	32/64-point module solder type connector (quantity 2). For pre-wired cable utilizing these specialty connectors, order part number ZL-4CBL4# where # designates either 0.5, 1, or 2 meter cable lengths. Ziplinks significantly increase wiring speed and reduce total installed costs. Accessory cable connector module for ZL-4CBL4# cable is part number ZL-CM40.	\$90
D4-IO3264R	32/64-point module ribbon type connector (quantity 2). For pre-wired cable utilizing these specialty connectors, order part number ZL-4CBL4# where # designates either 0.5, 1, or 2 meter cable lengths. Ziplinks significantly increase wiring speed and reduce total installed costs. Accessory cable connector module for ZL-4CBL4# cable is part number ZL-CM40.	\$98
D4-IOCBL-1	I/O cable for 32 or 64-point modules. Pre-wired D4-IO3264S connector and cable with pigtail, 3m length	\$160