

Cleco

CONTROLLERS & SOFTWARE



SLOVAKIA s.r.o.

INTOOL

Cleco | Tame the Line

SHOWN: CONTROLLERS

CONTROLLERS & SOFTWARE

**OPTIMIZE CONNECTIVITY.
MAXIMIZE VERSATILITY.**

**CLECO CONTROLLERS ARE
DESIGNED TO SEAMLESSLY
CONNECT YOU TO YOUR
ASSEMBLY LINE.**

Our versatile Controller Systems manage a wide variety of assembly tools and applications, delivering advanced process configurations and flexible tightening solutions.



Controller Selection Guide

Cleco makes it easy to find the right Controller system for your tools and applications.

mPro Controllers	CellTek	CellCore	NeoTek	LiveWire	18/48 Nutrunner	I-Wrench	Conventional Spindles	Mini Spindles	Intelligent Spindles
mPro400GCD-P	✓	✓	✓	✓	✓	✓			✓
mPro400GCD-M	✓	✓		✓		✓			✓
mPro400GCD-SH					✓				
mPro400GCD-BTS			✓						✓
mPro300GCD			✓					✓	
mPro300GCD-STO							✓		
mPro200GC	✓	✓		✓		✓			
mPro200GC-AP	✓	✓		✓		✓			



Software Solutions

mProRemote - TorqueNet - Tightening Parameter Server - Dashboards



Data Management

- Streamline enforcement of access, provisioning, and lifecycle management of parameters
- Provide complete and unified control over content, modification, users and security
- Provides easy access to collected production data via web browser



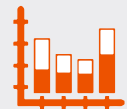
Product Optimization

- Remote management allows you to push changes to production from the software versus having to physically walk or go to the production line
- Convenient monitoring for use and location of all applications enables you to easily identify which tightening parameters are used in a given location



Error Prevention

- User-specific views in the dashboard provide meaningful data analysis that is relevant and actionable
- Change management capabilities provide ultimate control over authorizing changes prior enabling in production



Quality Assurance

- Application archiving & rollback capabilities save application revisions so they can easily be reinstated into production
- Visibility & traceability features allow you to review who, what, why and when a change was implemented

For more information on the production benefits of Cleco Software Solutions, visit <https://www.clecotools.com/cleco-care/software-solutions>

mPro400GCD - Global Controller - Transducer Control - Hybrid

For corded and cordless tools. Provides unsurpassed levels of flexibility, connectivity, and serviceability while providing superb torque accuracy and process control for safety-critical applications.

- Supports: NeoTek 30/50/70 Series, LiveWire, 18/48/17/47/67 Series, and Conventional BB Spindles
- Transducer Controlled
- Controls up to 16 corded/cordless tools
- User friendly 8.5" interactive screen enables simple programming and quick access to tightening data
- Standard CompactFlash memory card stores up to 10,000* run downs and can be easily switched between controllers with a reboot time under a minute
- Remote programming software enables control of the production process from anywhere



Model	Tool Compatibility	Height	Depth	Width	Weight	
		in	in	in	Lb	kg
mPro400GCD-M	LiveWire CellCore CellTek Intelligent Spindles	15	11.34	10.5	21.3	9.7
MPRO400GCD-M-AP	Livewire, Cellcore, Celltek, Intelligent Spindles	15	11.34	10.5	21.3	9.7
mPro400GCD-P	NeoTek 30/50/70 Series LiveWire CellCore CellTek 18/48/17/47/67 Series Conventional BB Spindles	15	11.34	10.5	30.2	13.7
mPro400GCD-SH	NeoTek 30/50/70 Series 18/48/17/47/67 Series Conventional BB Spindles	15	11.34	10.5	28.2	12.8

Note: 17/47/67 Series Tools require Adapter Cable 961789PT.
 70 Series Tools require a 220/230 power supply to the controller.
 Note: Larger capacity CompactFlash memory card can be added to increase number of stored run downs.

mPRO400GCD-P-BTS Global Controller Primary for Fixtured Intelligent Spindles

- This stand-alone system controller provides unsurpassed levels of flexibility, conductivity, and serviceability while providing superb torque accuracy and process control for safety-critical application.
- Control Capacity
 - Size 1: 2 Spindles
 - Size 2: 1 Spindle
 - Size 3: 1 Spindle
 - Size 4: 1 Spindle



Model	Tool Compatibility	Height	Depth	Width	Weight	
		in	in	in	Lb	kg
mPRO400GCD-P-BTS	Intelligent Spindles	15	11.34	10.5	30.2	13.7
mPro400GCD-P-STO	Intelligent Spindles	15	11.34	10.5	30.2	13.7

mPro300GCD - Global NeoTek Controller

The mPro300 Series Controller is specifically designed for NeoTek corded assembly tools. The mPro300 provides versatile protocol functionality and easy integration into plant systems.

- Designed for NeoTek Corded Assembly Tools
- The mPro300 Series Controller is specifically designed for NeoTek corded assembly tools. The mPro300 provides versatile protocol functionality and easy integration into plant systems.
- Connected Corded
- Dedicated one-to-one connected solution for NeoTek tools
- Easy to Use
- Large touch screen enables simple programming and quick access to tightening data
- Versatile
- Seamlessly integrate with multiple plant protocols



Controllers & Software

Model	Tool Compatibility	Height	Depth	Width	Weight	
		in	in	in	Lb	kg
mPro300GCD-APAC	NeoTek	16.1	11.7	5.6	25.6	11.61
mPro300GCD-EMEA	NeoTek	16.1	11.7	5.6	25.6	11.61
mPro300GCD-NA	NeoTek	16.1	11.7	5.6	25.6	11.61

mPro300GCD-STO - Global Controller - Controller Fixtured Spindles

The mPro300 Series Controller is specifically designed for BD Fixtured Spindles. The mPro300 provides versatile protocol functionality and easy integration into plant systems.

- Connected - Dedicated one-to-one connected solution for BD Fixtured Spindles
- Easy to Use - Large 7" touch screen enables simple programming and quick access to tightening data
- Versatile - Seamlessly integrate with multiple plant protocols
- Protection Class - IP42



Model	Tool Compatibility	Height	Depth	Width	Weight	
		in	in	in	Lb	kg
mPro300GCD-STO-APAC	BD Fixtured Spindles	16.1	11.7	5.6	25.6	11.61
mPro300GCD-STOE-MEA	BD Fixtured Spindles	16.1	11.7	5.6	25.6	11.61
mPro300GCD-STONA	BD Fixtured Spindles	16.1	11.7	5.6	25.6	11.61

mPro200GC - Global Controller - Transducer Control

The mPro200 Controller can be connected to 10 Cleco cordless tools. Easily capture data in real time within a plant network.

- Compact - Save space on the line (4.5" vs. 10.5" on GCD400)
- Intelligent - 19 fastening strategies for all types of applications
- Easy to Use - Run remotely via mPro remote, or connect an external display using VGA output
- Standard CompactFlash memory card stores up to 10,000* run downs and can be easily switched between controllers with a reboot time under a minute
- Versatile - Compatible with CellCore, LiveWire and I-Wrench
- mPro200GC provided with North America 110V power cord only



Model	Tool Compatibility	Height	Depth	Width	Weight	
		in	in	in	Lb	kg
mPro200GC	LiveWire CellCore I-Wrench	13.4	12.6	4.4	7.1	3.23
mPro200GC-AP	LiveWire CellCore I-Wrench	13.4	12.6	4.4	7.5	3.43
mPro200GC-AP-G	LiveWire CellCore I-Wrench	13.4	12.6	4.4	7.5	3.43
mPro200GC-G	LiveWire CellCore I-Wrench	13.4	12.6	4.4	7.1	3.23

Note: Larger capacity CompactFlash memory card can be added to increase number of stored run downs.

Power Distribution System with mPro400SG Global Controller for Intelligent Spindles

- Graphic Interface
- Fully Programmable
- Local storage of 10,000 cycles
- LAN Capable
- Fieldbus options available



Model	Tool Compatibility	Height	Depth	Width
		in	in	in
S112849-SG	Spindles - Size 1&2 1.2/01-channel	14.2	11	18.9
S112850-SG	Spindles - Size 1&2 1.2/01-channel	14.9	13.8	30
S112870-SG	Spindles - Size 3&4 3/4 01-channel	14.9	13.8	30
S112871-SG	Spindles - Size 3&4 3/4 01-channel	14.9	13.8	30

mPro400GC-SG Global Controller - Panel Mounted

Panel mount installation

- Graphic Interface
- Fully Programmable
- Local storage of 10,000 cycles
- LAN Capable
- Fieldbus options available



Model	Tool Compatibility
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MPRO-400GC-SG	LiveWire Intelligent Spindles Size 1-4
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Panel Mount can be used in different cabinet solutions.

Controllers & Software

Power Control Package

- Each Power Control Package consists of the following:
- mPro400 GC-M Global Controller
- PDB-CPS X power distribution box with viewing window
- Power transformer
- Stand

Model
MPRO400GCMPCBCPS3A
MPRO400GCMPCBCPS3T
MPRO400GCMPCBCPS6A
MPRO400GCMPCBCPS6T
MPRO400GCMPCBCPS9A
MPRO400GCMPCBCPS9T

T=PLC Siemens S7 for additional I/O



Power Distribution System for Intelligent Spindles

The Power Distribution System is used in conjunction with the Intelligent Spindles. This system is used for power distribution.



Model
PDB-CPS3
PDB-CPS6
PDB-CPS9

Includes standard hardware such as E stop circuitry, 24VDC power supply, line filter, CPM, necessary relays, disconnect and viewing window. External power transformer is required.

Power Distribution System - EU

The Power Distribution System is used in conjunction with the Intelligent Spindles. This system is used for power distribution.



Model
S112925-OC Power Modul CPM3
S112929-OC Power Modul CPM6
S112932-OC Power Modul CPM9

Includes standard hardware such as E stop circuitry, 24VDC power supply, line filter, CPM, necessary relays, disconnect and viewing window. External power transformer is required.

Torque Transducer Verification Fixture (TTVF)

Fast, accurate, cost effective way to verify your torque transducer on the assembly line measure.



Model
579900PT-1000
579900PT-200
579900PT-23
579900PT-500
579900PT-68

Included is a joint simulator, slip ring torque transducer and spindle adapter. The joint simulator can be mounted to a tooling plate or mounted to the spindle directly. Any data recorder with the proper interface can be used.

TSnet Cable

- Used to connect mPro400GCD-P, mPro400GCD-SH or mPro400GCD-M controllers



Model	Description
962037-002	.2 Meter TSnet Cable
962037-005	.5 Meter TSnet Cable
962037-010	1 Meter TSnet Cable
962037-020	2 Meter TSnet Cable
962037-030	3 Meter TSnet Cable
962037-040	4 Meter TSnet Cable
962037-050	5 Meter TSnet Cable
962037-100	10 Meter TSnet Cable
962037-200	20 Meter TSnet Cable
962037-300	30 Meter TSnet Cable
962037-500	50 Meter TSnet Cable

Fieldbus Module - Ethernet IP

- For use in mPro400 and mPro200 Series controllers (544172PT)
- For use in mPro300 (962297PT)



Model	Description
544172PT	Anybus Ethernet IP
962297PT	Anybus Ethernet IP

Fieldbus Module - Profibus

- For use in mPro400 and mPro200 Series controllers



Model	Description
544173PT	Anybus Profibus

Fieldbus Module - Profinet

- For use in mPro400 and mPro200 Series controllers



Model	Description
544174PT	Anybus Profinet

Fieldbus Module - Modbus - TCP

- For use in mPro400 and mPro200 Series controllers



Model	Description
544211PT	Anybus TCP Modbus Module

System Bus Termination Plug

- For use with system bus accessories and mPro400GC-S controllers

Model	Description
544197PT	System Bus Termination Plug



System Bus Termination Plug - EU

- For use with system bus accessories and mPro400GC-S controllers

Model	Description
S133412	System Bus Termination Plug



System Bus Cables for Intelligent Spindle

- Used to connect system bus accessories to mPro400 series controllers
- Used to connect Pro400GC-P, mPro400GC-S or mPro400GC-M controllers

Model	Description	Length	
		ft	m
544196-005	0.5 Meter System Bus Cable	1.6	0.5
544196-020	2 Meter System Bus Cable	6.6	2
544196-050	5 Meter System Bus Cable	16.4	5
544196-200	20 Meter System Bus Cable	65.6	20
544196-500	50 Meter System Bus Cable	164.1	50



16 I/O System Bus Expander

- Connects through system bus port
- Provides 16 additional 24v I/O connections

Model	Description
S133437	I/O Expansion Module - 16

Socket Tray - System Bus - 4 & 8 Position

- Connects through system bus port
- Quick and simple setup
- Can be networked with up to 31 additional accessories

Model	Description
S133410	4 Position Socket Tray
S133411	8 Position Socket Tray
S970716	Socket Tray Insert



Stack Light - System Bus - w/Buzzer

- Connects through system bus port
- Quick and simple setup
- Can be networked with up to 31 additional accessories

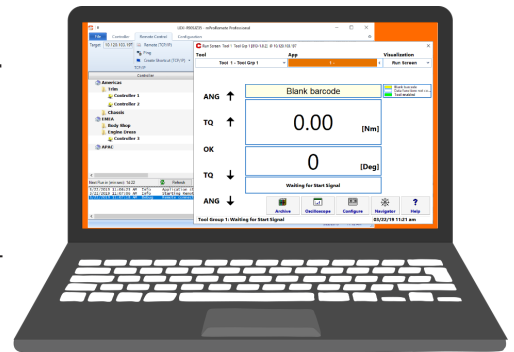
Model	Description
S133420	Stack Light With Buzzer



mProRemote - Software

Integrated software that enables programming of application parameters for a controller remotely

- Access controllers remotely from a networked PC or laptop
- Provides mirrored screen images of what operator on plant floor is seeing
- Monitor rundown results, make programming changes, and perform diagnostics in real-time



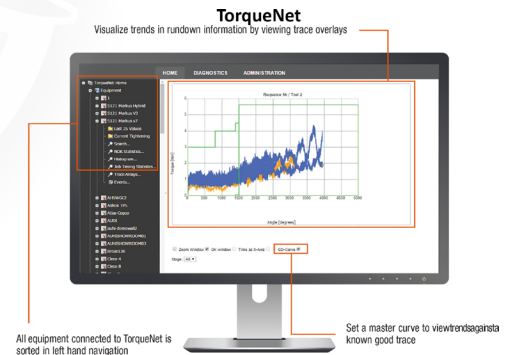
Model	Description
mProRemote	Provided with each mPro400GC-M & mPro400GC-P
TM-COM	Provided with each mPro400GC-E & mPro400GC-I

Controllers & Software

TorqueNet - Software Solutions

Enables data collection and analytics by making the plant floor data visible anywhere using an internet browser.

- Make your plant floor data visible anywhere using an internet browser
- Data is sent to a single location making critical production information accessible to all users within the tightening process on the assembly line
- Easily compare traces against known good traces
- Provides preventative maintenance notifications

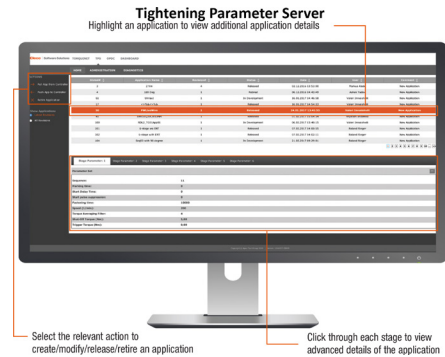


Model	Description	Min. Disk Space	Min. Operating System	Min. Processor Speed	Min. Ram	Min. Virtual Memory	Price Method
S168171-NT-4	TorqueNet Enterprise Single Spindle	30 GB	Windows Server 2008 - 2012 Windows 7/10	1.2 GHz	4 GB	8 GB	Per Spindle
S168171-PR-4	TorqueNet Professional Single Spindle	30 GB	Windows Server 2008 - 2012 Windows 7/10	1.2 GHz	4 GB	8 GB	Per Spindle
S168171-ST-4	TorqueNet Standard Single Spindle	30 GB	Windows Server 2008 - 2012 Windows 7/10	1.2 GHz	4 GB	8 GB	Per Spindle
S168696-ST-1	Open Protocol DC - TorqueNet Add-on	30 GB	Windows Server 2008 - 2012 Windows 7/10	1.2 GHz	4 GB	8 GB	Per Spindle

TPS - Software Solutions

Enables full control of tightening applications used across a plant or over multiple plants, effectively minimizing opportunities for costly issues.

- Central Application Management for efficiently managing tightening applications from a central location
- Provide real-time change management
- Application archiving and rollback capabilities
- Full control of tightening applications across one or multiple plants
- Accurately stores all controller information into a central database

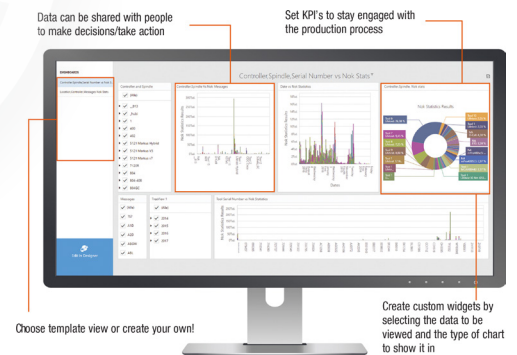


Model	Description	Min. Disk Space	Min. Operating System	Min. Processor Speed	Min. Ram	Min. Virtual Memory	Price Method
S168689-ST-2	Tightening Parameter Server (TPS) Single Spindle	30 GB	Windows Server 2008 - 2012 Windows 7/10	1.2 GHz	4 GB	8 GB	Per Spindle

Dashboard - Software Solutions

Improves analysis speed and performance through enabling comprehensive data analysis that is critical to manufacturing operations.

- Empowers with the ability to explore data through customized views
- User specific views enables quick navigation
- Share data to make decisions and take action
- Stay engaged with the production process by creating your own KPI's



Model	Description	Min. Disk Space	Min. Operating System	Min. Processor Speed	Min. Ram	Min. Virtual Memory	Price Method
S168703-ST-1	Dashboard Manager	30 GB	Windows Server 2008 - 2012 Windows 7/10	1.2 GHz	4 GB	8 GB	Per Spindle

2 CPU cores or more recommended.
 Additional disk space may be required depending on total number of spindles.
 TorqueNet Standard to Pro and TorqueNet Standard to Enterprise upgrade packages are also available.
 TorqueNet Pro to Enterprise upgrade package available.
 Please contact your Cleco Sales Representative for more details.