chameleon

Plug&Play
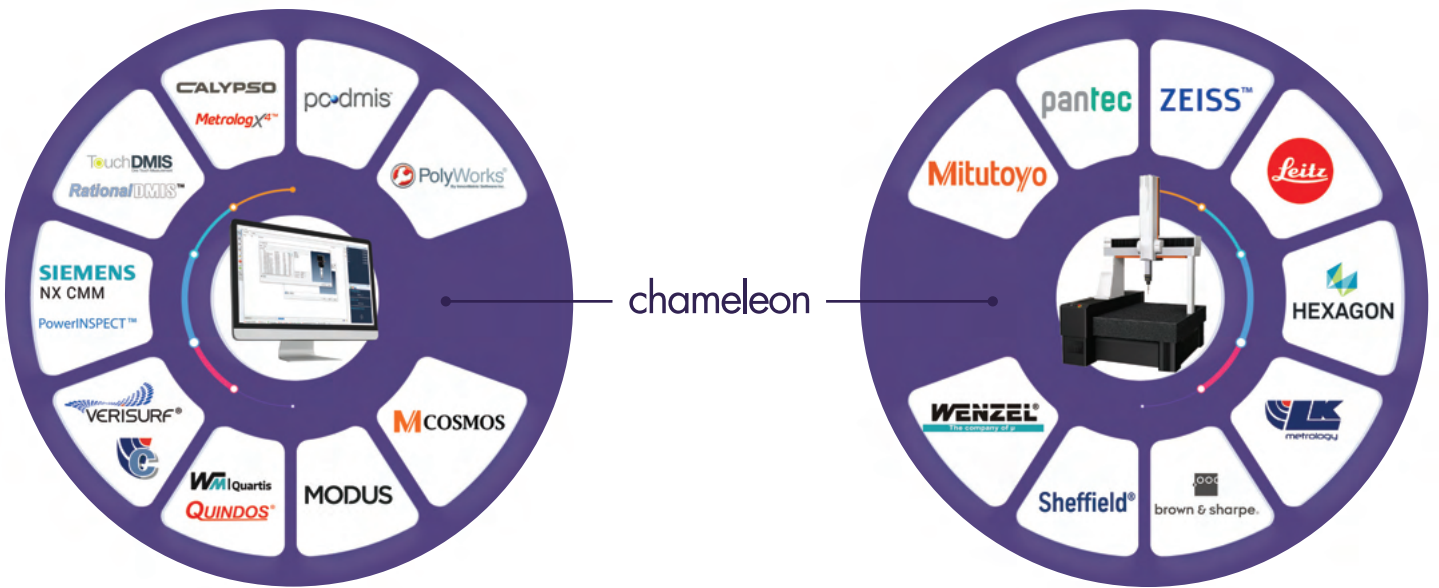## Retrofit
CMM Motion
Controller

easyCMM

Chameleon is the most advanced retrofit CMM motion controller on the market.

As per its name, Chameleon can disguise itself as the original controller of most CMM brands, since it can:

Natively communicate with all leading CMM software

Connect to any CMM in a plug&play manner

Chameleon shows superior performance to the existing CMM controllers and is designed to work with the most advanced optical sensors, both current ones and those which will be released in the future.

chameleon

Keep Your Existing Software and Part-programs Untouched
Retrofit your CMM without the need to do any software upgrading, part-program rewriting, or I++ protocol adaptation

Dramatically Reduce Retrofitting Time & Cost
No need for cable cutting, rewiring work, or conducting full calibration

Retrofitting to Chameleon may take less than 1 day!

Superior Performance
Increase your CMM productivity with up to x2 faster scanning speed and up to x10 sampling rate

Future Proof
Make sure your CMM can support any advanced optical sensor

Supports all leading CMM Inspection Software

All existing retrofit controllers force you to either upgrade your CMM software or replace it with a different one, and then rewrite hundreds of part programs. Relying on the I++ protocol is also a problem, since it still entails substantial part program modifications and deficient functionality. Chameleon puts an end to this problem with its unique capability to natively communicate with all leading CMM software – meaning that you can now retrofit your machine to the most advanced controller and yet keep your part programs untouched.

Plug&Play Retrofit

Coming with several different rear panels (compatible with Mitutoyo, Renishaw and Hexagon), Chameleon substantially simplifies the retrofitting process and turns it from a complex task into a plug&play experience. Retrofitters don't need to cut any cable or do any rewiring work, and subsequently saving a lot of working days and money to the CMM owner.

Error-map Recycling

In addition to the plug&play concept, Chameleon reduces the labor time even more, since it can read and reuse the former error-map of the replaced controller. This allows the retrofitter to skip the time-consuming 21-parameters full calibration process, and just make a quick squareness and linearity compensation.

Advanced Sensor Support

The CMM market is constantly moving towards the utilization of optical sensors. Be it line-laser, confocal, or structured-light sensors, the future of the CMM market is in the combination of these advanced technologies with traditional touch probing. Chameleon architecture is specially designed to support all existing state-of-the-art sensor technologies, and those which would be introduced in the future.

Same Accuracy. Better Performance

Chameleon introduces a much better performance compared to other retrofit controllers, without compromising on the machine's accuracy level, as defined by the CMM vendor. It can smoothly move any CMM platform in complex 3D trajectories and support a high sensor sampling rate while performing known and unknown scanning.

Native Software Communication (No I++ protocol)	PC-DMIS, Mcosmos, Calypso, TouchDMIS, Verisurf, Polyworks, Camio, Quartis
I++ Protocol Support	√
Error-map Support	Hexagon (DEA + B&S), Zeiss, Mitutoyo, Renishaw, Wenzel, LK, Sheffield
Touch-trigger Probe Support	TP20, TP200 SP25, SP80, SP600
Number of CMM Axes Controlled	3 or 4
Temperature Sensor Inputs	10
Maximum Sampling Rate	2500 points/sec
General	4 Inputs + 3 Outputs
Emergency Stop	√
Communication Type	Ethernet
Digital Scale Input	Digital and Analog (sin/cos)

Dimensions:

Width	425mm (19" enclosure)
Height	175mm (4U)
Depth	445mm