



Accessories 2018

Table of contents

Passive markers & clusters	4
Super-spherical markers	
Passive threaded markers	
Glue for attaching markers on skin	
Passive soft markers	
Cluster for gait analysis	
Double adhesive tape	
Active markers.....	6
Short Range Active Markers – biomechanical applications	
Long Range Active Markers – marine & industrial applications	
Carrying cases	
Mocap suits & accessories.....	7
Suits	
Nappy Hat	
Shoes	
Calibration equipment.....	9
Wand calibration set	
Wand replacement set	
Lenses.....	10
Lens correction matrix	
Sun Filter	
Camera mounting devices.....	11
Tripods	
Wall mounting bracket	
Super clamp	
Aluminum rails	
Video devices & connections.....	12
Video devices	
Videos	
Force plates	
EMG devices	
Analog interface	13
USB Analog Acquisition interface	
PCI Analog Output interface	
Trigger & sync devices.....	14
Wireless trigger switch	
Trigger switch	
Split cable	
Sync units	
Communication, cables & power supply	15
Computer	
Host cables	
Data cables	
Data/power cables	
Power supply	
Miqus cables	



Passive Markers

PASSIVE THREADED MARKERS

Threaded markers are taped and have a flat bottom.

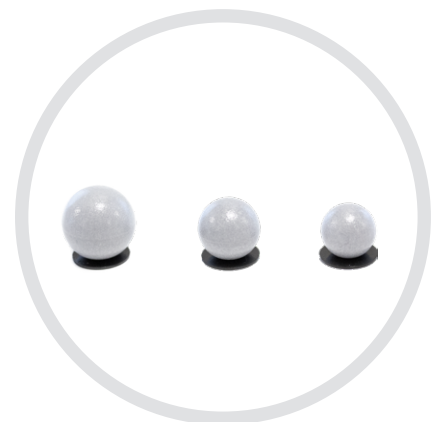
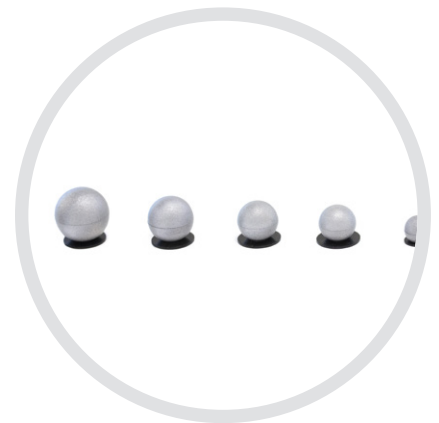
Article no.	Description
160051	Marker, spherical threaded Ø12 mm
160053	Marker, spherical threaded Ø16 mm
160052	Marker, spherical threaded Ø19 mm
160059	Marker, spherical threaded Ø30 mm
160055	Marker, spherical threaded Ø40 mm
160056	Marker, spherical threaded Ø50 mm



SUPER-SPHERICAL MARKERS

High quality, lightweight markers designed for maximum roundness, with an M3/M4 center threaded cylinder resulting in greater spherical accuracy and identification of the marker centroid. The markers are sold in packages with 10, 50 and 100 pieces and include plastic bases. UW are suitable for under water.

Article no.	Description
160300	Marker, super-spherical Ø6.5mm M3, 10 pc
160301	Marker, super-spherical Ø6.5mm M3, 50 pc
160302	Marker, super-spherical Ø6.5mm M3, 100 pc
160310	Marker, super-spherical Ø8mm M3, 10 pc
160311	Marker, super-spherical Ø8mm M3, 50 pc
160312	Marker, super-spherical Ø8mm M3, 100 pc
160320	Marker, super-spherical Ø9.5mm M3, 10 pc
160321	Marker, super-spherical Ø9.5mm M3, 50 pc
160322	Marker, super-spherical Ø9.5mm M3, 100 pc
160330	Marker, super-spherical Ø12.5mm M4, 10 pc
160331	Marker, super-spherical Ø12.5mm M4, 50 pc
160332	Marker, super-spherical Ø12.5mm M4, 100 pc
160340	Marker, super-spherical Ø14mm M4, 10 pc
160341	Marker, super-spherical Ø14mm M4, 50 pc
160342	Marker, super-spherical Ø14mm M4, 100 pc
160360	Marker, super-spherical Ø16mm M4, 10 pc
160361	Marker, super-spherical Ø16mm M4, 50 pc
160362	Marker, super-spherical Ø16mm M4, 100 pc
160380	Marker, super-spherical Ø19mm M4, 10 pc
160381	Marker, super-spherical Ø19mm M4, 50 pc
160382	Marker, super-spherical Ø19mm M4, 100 pc
160395	Marker, plastic base Ø10mm M3, 10 pc
160396	Marker, plastic base Ø16mm M4, 10 pc
160350	Marker, super-spherical Ø14mm UW M4, 10 pc
160351	Marker, super-spherical Ø14mm UW M4, 50 pc
160352	Marker, super-spherical Ø14mm UW M4, 100 pc
160370	Marker, super-spherical Ø16mm UW M4, 10 pc
160371	Marker, super-spherical Ø16mm UW M4, 50 pc
160372	Marker, super-spherical Ø16mm UW M4, 100 pc
160390	Marker, super-spherical Ø19mm UW M4, 10 pc
160391	Marker, super-spherical Ø19mm UW M4, 50 pc
160392	Marker, super-spherical Ø19mm UW M4, 100 pc



PASSIVE SOFT MARKERS

Soft markers are rather durable units. They consist of two major parts: the marker itself with an inbuilt screw and a two-sided neoprene base. The marker is a foam ball covered by a scotch-lite reflective film. Each package contains 10 markers.

Article no.	Description
160156	Passive Marker - Soft Ø12.5 mm with 38 mm neoprene base
160155	Passive Marker - Soft Ø15 mm with 38 mm neoprene base
160154	Passive Marker - Soft Ø19 mm with 38 mm neoprene base
160160	Passive Marker - Soft Ø12,5 mm, hook base 25mm
160159	Passive Marker - Soft Ø15 mm, hook base 25mm
160158	Passive Marker - Soft Ø19 mm, hook base 25mm



CLUSTER FOR GAIT ANALYSIS

A cluster is a specially designed thin, light-weight rigid plastic fixture with 3-4 markers and can be placed on any segment of interest. A set of clusters includes two fixtures, 15 mm soft markers and superwraps.

Article no.	Description
160145	2 Marker clusters, lower body with 8 markers and band
160146	2 Marker clusters, upper body with 6 markers and band
160149	Superwrap for cluster



TAPE

The passive reflective markers are usually applied directly on the skin with double adhesive tape. If the user would like to create his or her own markers, there is a retro-reflective marker material available in form of a tape.

Article no.	Description
160188	Tape, double adhesive for applying markers on skin
160054	Retro-reflective tape, 1 sheet 210x297mm

GLUE FOR ATTACHING MARKERS ON SKIN

For especially demanding applications, glue can be used as option to double adhesive tape. This can be the case for long underwater usage or in some cases during the measurement of animals.

Article no.	Description
160185	Glue Mastix Silicone 30 ml, suitable for attaching base on skin
160187	Glue Mastix Spirit Gum 50 mm, for applying markers on skin
160184	Remover Mastix 100 ml



Active markers

Qualisys is one of the few motion capture companies in the world that uses both passive and active markers together with the same hardware and software. They are used in both biomechanical and industrial contexts that require outdoor measurements in direct sunlight, or in other environments where reflections can cause problems.

SHORT RANGE ACTIVE MARKERS – BIOMECHANICAL APPLICATIONS

The short distance markers consist of a rechargeable control unit, control electronics, and small active markers which are connected to the unit. Up to eight active markers are connected per wire. Each control unit can use four wires, 32 markers at the same time. The sequence coded markers are easily set-up in QTM and can run up to 500 fps.

Article no.	Description
160640	Active Marker, Short Range - Kit 8 markers
160630	Active Marker, Short Range - Driver for 32 markers
160635	Active Marker, Short Range - 4 markers
160636	Active Marker, Short Range - 8 markers

LONG RANGE ACTIVE MARKERS – MARINE & INDUSTRIAL APPLICATIONS

The Long Range Active Marker is used in large volumes where distances are too great for passive markers. The driver unit drives up to four active markers and is triggered by an IR detector or another driver unit (or possibly any other sync source). It can be powered either from a rechargeable Li-Ion battery or any 12VDC source, and can track over 100 meters away at frequencies up to 200 fps. All units are IP65 splash proof.

Article no.	Description
160685	Active Marker, Long Range - Kit 4 markers
160670	Active Marker, Long Range - Driver for 4 markers
160671	Active Marker, Long Range - Marker 50mm, 5 meter
160678	Active Marker, Long Range - IR Receiver, 5 meter

CARRYING CASES

The Qualisys camera system can be stored in a special shock-proof carrying case for safe transport. The case is ideal if the user needs a portable solution.

Article no.	Description
410700	Case for six Miquis cameras
410701	Case for Miquis cables
510700	Case for four cameras, 5+wide & 7+
510701	Case for four cameras 210c, 5+, 6+
510705	Case for power supply and cables 5+,6+,7+



Mocap suits & accessories

SUITS

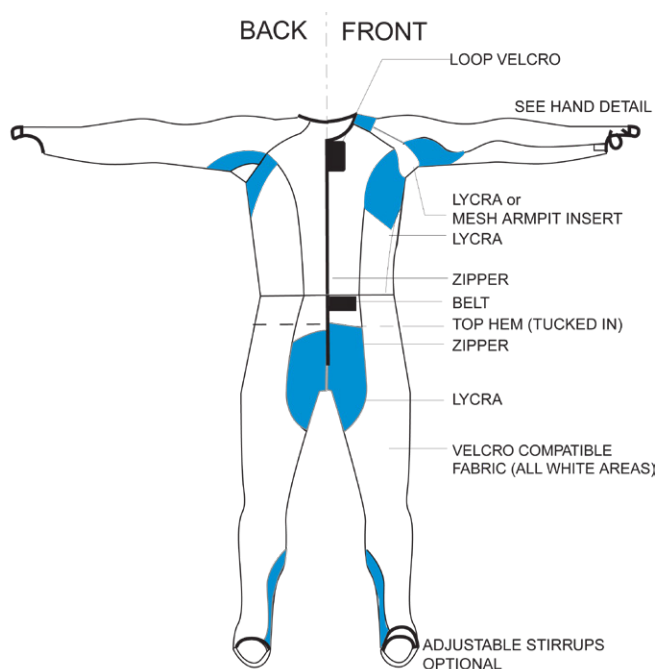
Mocap suit material has to stretch enough to allow the wearer no restriction and free of movement while also being strong and sturdy enough so that markers can be attached to the Velcro compatible surfaces.

The mocap suit has top and bottom zippers to facilitate easy changing. The material is a Nylon/Lycra, Velcro-compatible knit fabric, usually black, with Nylon/Lycra inset panels, in a variety of colors or prints.

Markers with hook bottoms can be easily attached to the fabric. Various shapes and sizes of marker support patches help prevent markers from falling off. Instructions for washing are available on the Qualisys website.

Men			Women		
Small	5'6" (1.65 m)	140 lbs (63.5 kg)	X-Small	5'0" (1.52 m)	100 lbs (45.4 kg)
Medium	5'9" (1.75 m)	170 lbs (77.2 kg)	Small	5'3" (1.60 m)	115 lbs (52.3 kg)
Large	6'0" (1.80 m)	195 lbs (88.5 kg)	Medium	5'6" (1.65 m)	130 lbs (59.0 kg)
X-Large	6'3" (1.90 m)	225 lbs (102.2 kg)	Large	5'9" (1.75 m)	150 lbs (68.1 kg)

Article no.	Description
160110	Mocap Suit PEX men, black/ small
160111	Mocap Suit PEX men, black/ medium
160112	Mocap Suit PEX men, black/ large
160113	Mocap Suit PEX men, black/ x-large

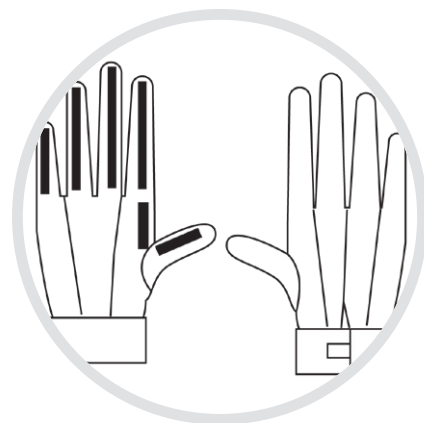


NAPPY HAT

Article no.	Description
160126	Mocap Nappy Hat Velcro/Lycra or Mesh

GLOVES

Article no.	Description
160120	Mocap Gloves with silicon grip strips



SHOES

The rubber shoe covers are best for shoes without heels. The covers are not suitable for rapid changes in direction. Dress shoe covers have a piece of material enclosing the toe and a piece under the ball of the foot.

Article no.	Description
160123	Mocap shoe covers rubber sole with front zipper, size L
160124	Mocap shoe covers rubber sole with front zipper, size M
160125	Mocap dress shoe cover for men's 1"heel

Calibration equipment

WAND CALIBRATION SET

The calibration set includes a wand, L-shaped reference structure and a custom carrying case.

RECOMMENDED SIZES FOR DIFFERENT VOLUMES:

Article no.	Description	Volume
130462	Calibration kit 120, with 120 wand	< 1 m ³
130460	Small carbon calibration kit, 300 wand	1 m ³ – 12 m ³
130456	Carbon calibration kit, 600 wand	> 12 m ³
130453	Active calibration kit	



Folding L-frame

The L-frame can be folded to save space.



Water level

Two water levels make it easy to get an upright coordinate system.



Force plate alignment

Quickly align the L with a force plate using the alignment plates.



Floor-aligned origo

Properly align the coordinate system with your lab floor.



Spherical markers

Get maximum calibration accuracy with spherical markers.



Level adjustment

Get the L leveled quickly with the level adjustment screws.

WAND REPLACEMENT SET

Qualisys offers “Wand Replacement Sets” that include four spherical markers with thread to replace worn-out markers on the reference structure and a factory calibrated marker rod.

Article no.	Description
130461	Wand 300 replacement set
130458	Wand 600 replacement set

Lenses

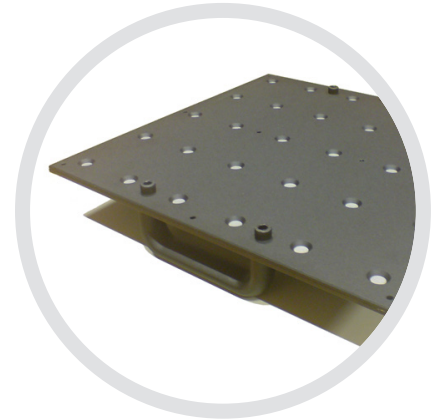
For an interactive tool giving you the knowledge of which lenses are compatible with which cameras go to:

<http://www.qualisys.com/cameras/miquis/#tech-specs>

LENS CORRECTION MATRIX

The lens correction matrix is needed to perform a new linearization after changing lenses.

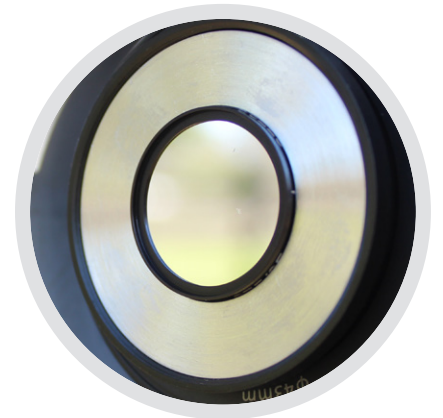
Article no.	Description
200026	Lens correction matrix (6x5 rows)



SUN FILTER

The Sun Filter is a custom made bandpass filter, engineered to match the 5+, 6+ and 7+ camera perfectly. It removes more than 97% of the solar light with only a 20% reduction in strobe efficiency. In practical terms, this can be the difference between a successful motion capture session and a failed one when capturing in strong sunshine.

Article no.	Description
510105	Sun Filter for 7+, 22 mm
510108	Sun Filter for 7+, 40mm
510109	Sun Filter for 6+, 16 or 25mm lens
510118	Sun filter for 5+, 12.5 mm lens



Camera mounting devices

Qualisys provides different mounting solutions for different applications. The cameras are usually mounted either on tripods, wall mounting brackets, or on an installed rail system.

TRIPODS

Manfrotto tripods provide solid support and flexibility for the cameras. The 3-way tripod heads are designed to carry a specific load. Large ergonomically designed hand grips ensure effortless vertical and lateral tilting and 360 degree panning.

Article no.	Description	Height and weight
200074	Manfrotto head [MH 804-3W]	0.75 kg (load capacity: 4 kg)
200072	Manfrotto tripod [161MK2]	267 cm, 9 kg
200080	Manfrotto tripod head, Miquis [056]	0.55 kg (load capacity: 3 kg)
200085	Manfrotto tripod [475B]	188 cm, 5.3 kg
200090	Manfrotto tripod [290]	160 cm, 1.8 kg

WALL MOUNTING BRACKET

The Vitek mount is made of heavy-duty aluminum that makes the unit strong and durable. With an adjustable pan/tilt head, the mount supports 360° pan rotation and 90° tilt rotation. The Wall Mounting bracket for DV camera has a load capacity of 2.5 kg.

Article no.	Description
200400	Wall Mounting bracket for DV camera [#356]
200440	Wall Mounting bracket VT-HMT8, Vitek
240442	Wall Mounting bracket for Miquis camera [845-246]

SUPER CLAMP

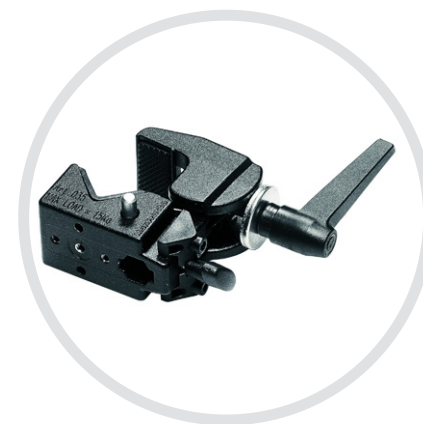
Manfrotto super clamp is designed to lock around a pole or tube. The clamp range is 13 - 55mm, the super clamp is ideal for small spaces or for use on existing interior. Note: A tripod head is needed to mount a camera.

Article no.	Description
200073	Mounting Device - Super Clamp w Tap 1/4"

ALUMINUM RAILS

Custom wall mounting solutions can be dimensioned based on your specific capture environment. The aluminum rails are very sturdy and cameras can be placed anywhere along the rail, which is ideal for repositioning your cameras.

Article no.	Description
200082	Mounting device - Rail system, per meter
200083	Mounting device - Rail system, per camera mount point



Video devices & connections

VIDEO DEVICES

QTM can record video, including sound, together with motion capture data. The video capture starts and stops in synchronization with the motion capture.

The synchronization is executed via Windows OS, therefore exact synchronization cannot be guaranteed. It is, however, within a quarter of a second. To run ordinary video cameras, use one PCI Express card per video camera. It can capture most video signals as HDMI and component, including various sound sources.

Article no.	Description
230614	Video Camera - HD video with HDMI output + 16 GB
230616	Video Cable - HDMI to HDMI, High Speed, 15m
230618	Video Cable - HDMI Repeater, Active
230620	Video Card - Black-magic Mini Recorder, PCI Express



VIDEOS

The Video 210c is a synchronized and dedicated color video camera that can be calibrated together with the motion capture system, providing a video image that is fully synchronized with the mocap data capture. The camera is automatically calibrated together with the rest of the system without the need for manual intervention. This makes it effortless to get 3D data overlaid on the video image, which provides additional visual aid for the user.

Miquis Video is the native video camera for use with your Miquis system. It streams perfectly synchronized and calibrated video for 3D data overlay. With its parallel on-board MJPEG encoder, the camera is able to stream full HD video (1080p) at 85 frames per second.

Article no.	Description
500210C	Video 210c - color video
400200VM	Miquis Video - monochrome
400200VC	Miquis Video - color video



FORCE PLATES

With a force plate, ground reaction forces can be captured together with the motion capture data. QTM supports the calculation of force data from manufacturers AMTI, Bertec and Kistler.

To integrate with Kistler force plates, extra cables are needed. To connect the A/D board to the Kistler box, use cable 230118. If you want to control the Kistler box directly in QTM, use cable 230137.

Article no.	Description
230118	Kistler - Cable Digital Channel USB64 to 5606 2xDSUB37M, 5 m
230137	Kistler - Cable Digital Channels USB64 to 2 x 5233A2

EMG DEVICES

With an EMG device the muscle activity can be measured together with the motion capture data. QTM can collect EMG data directly from Delsys Trigno, Mega ME6000 and Noraxon wireless. These EMG systems are integrated in QTM so that they can be collected directly without an extra analog board. Any EMG system with analog output can be connected to an analog board and then captured in QTM.

The following parts are needed to run the Noraxon and Mega EMG system wireless.

Article no.	Description
230058	MEGA - Wireless Trigger for synchronization
230049	Noraxon - Sync Cable, DTS to Qualisys [N-580H]

Analog interface

The Qualisys analog interfaces connect via USB and work on both laptop and desktop computers. They come in two models, one with 16 channels and one with 64 channels. Both are continuously synchronized with Qualisys cameras.

Article no.	Description
230597	Qualisys USB Analog Acquisition interface, 16 channels (BNC/USB)
230599	Qualisys USB Analog Acquisition interface, 64 channels (BNC/USB/19"rack)



Trigger and sync devices

WIRELESS TRIGGER SWITCH

The wireless trigger allows you to start and stop captures in QTM. The trigger also has an event button for creating events. The package consists of two parts: a trigger and a USB receiver that you plug into the computer running QTM.

TRIGGER SWITCH

The external trigger is used to send an external start pulse to the Qualisys camera system. It consists of an external push-button. When the button is pushed, the camera system starts the measurement. Triggers are available for both camera platforms

Note: The split cable is needed to connect the trigger switch.

SPLIT CABLE

The split cable for camera series 5,6, and 7 connects to the “Control” port of the camera and provides BNC-connections to the trigger, sync inputs and to the sync output. The camera can be synchronized to an external source and configured to accept almost any type of sync signal. Note: Complement with BNC-BNC cables.

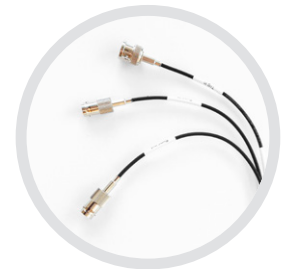
Article no.	Description
510860	External Trigger 10 m, for series 5,6, and 7
510865	Wireless Trigger
510870	Sync/Trig/Sync in Splitter, for series 5,6, and 7
510872	Trigger button Miquis

SYNC UNITS

3D motion capture systems can provide great detail on the motion of humans, animals, robots and just about anything that moves. Even greater detail on the object can be gathered if the motion data is combined with data from other devices. These include force plates, EMG sensors, eye trackers or analog data from any sensor sampled through an analog-to-digital converter.

A critical component to correlating data from multiple systems is to know that the data series are synchronized in time. Qualisys has gone to great lengths to provide a multitude of ways to synchronize data from other acquisitions systems to Qualisys camera systems.

Article no.	Description
410850	Miquis Sync Unit with SMPTE, IRIG and Video
510885	Sync Unit for series 5+, 6+, and 7+ with SMPTE and Video
510890	Sync Device Audio FireWire Audio Interface MOTU 828MK3 Hybrid

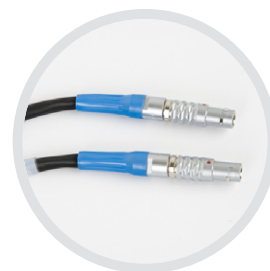
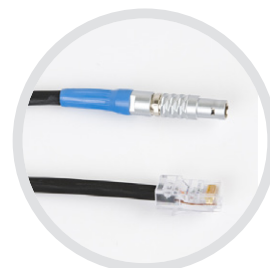


Communication, cables and power

COMPUTER

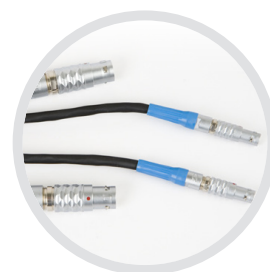
The cameras can be used with a desktop or a laptop PC and communicates with the host computer through a single Ethernet cable. The cameras are daisy-chained and no additional hub is needed to link them together.

Article no.	Description
170495	Computer - Desktop with 24"
170498	Computer - Laptop
101401	Ethernet - USB to Ethernet adapter (laptop)



HOST CABLES, FOR CAMERA SERIES 5+, 6+, AND 7+

Article no.	Description
510828	Host cable, 8 m
510821	Host cable, 15m
510826	Host cable, 30 m



DATA CABLES, FOR CAMERA SERIES 5+, 6+, AND 7+

Article no.	Description
510824	Data cable, 8 m
510822	Data cable, 15 m
510827	Data cable, 30 m



DATA/POWER CABLES, FOR CAMERA SERIES 5+, 6+, AND 7+

Article no.	Description
510823	Data/power cable, 8 m
510820	Data/power cable, 15 m
510825	Data/power cable, 30 m



POWER SUPPLY, FOR CAMERA SERIES 5+, 6+, AND 7+

Article no.	Description
510800	Power Supply - 4 camera, 120 W. UL-listed
510809	Power Supply - 5 camera, 240 W

MIQUS CABLES

Article no.	Description
410800	Miquis power kit
410820	Miquis Camera cable 10 m
410822	Miquis Camera cable 5 m

QUALISYS
Motion Capture Systems



Distributor / Agent:

AIMedical International Pty Ltd
sales@aimedical.com.au
Ph 08 8294 8664
1300 ASK AIM

QUALISYS



qualisys.com

sales@qualisys.com

Qualisys Europe

Gothenburg, Sweden

Qualisys Americas

Chicago, USA

Qualisys Asia Pacific

Shanghai, China