



BLASTER'S HIGH-SPEED
DIGITAL VIDEO CAMERAS
&
ASSOCIATED ACCESSORIES
2012 PRODUCT LIST

SUBJECT TO UPDATE ON: 30 JUNE 2012

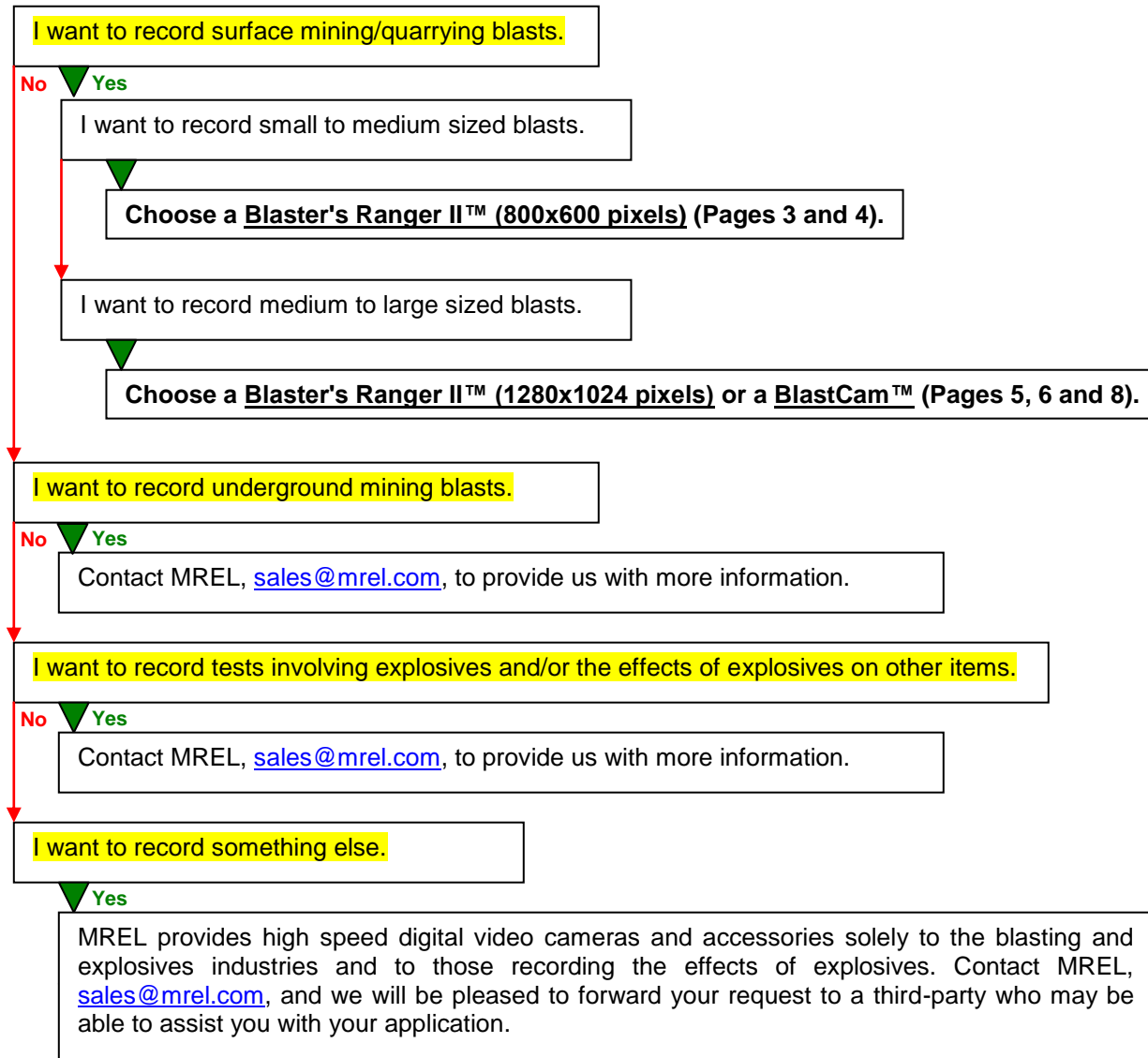
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THESE PRODUCTS ARE AVAILABLE TO
PRE-SCREENED, PRE-APPROVED CUSTOMERS ONLY.

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SELECTING THE CAMERA AND ACCESSORIES FOR YOUR APPLICATION:



BLASTER'S RANGER II™ HIGH SPEED CAMERAS:

HOW TO SELECT THIS PRODUCT:

Decide on 800 x 600 pixel resolution or 1280 x 1024 pixel resolution and then either a monochrome or color camera. Consider selecting one or more of the Optional Upgrades and Accessories listed below.

<u>Product #</u>	<u>Product Name</u>	<u>Unit</u>	
1-53-45	BLASTER'S RANGER II™ HIGH SPEED CAMERA (800x600/MONO/2GB)	each	

Blaster's Ranger II™ Model RAI-LM2-O: Rugged (machined aluminum), portable, monochrome (3,200 ISO), high speed video camera with built-in, ultra-bright 178 mm (7 in.) WVGA LCD viewfinder and push-button controls. Maximum recording speed = 1,250 fps. Maximum horizontal x vertical resolution at all speeds = 800 x 600 pixels. Recording time of 4.5 seconds at 1000 fps at maximum resolution. Operation from internal rechargeable battery (3 hrs.), external 10-30 VDC, or 110-220 VAC. USB ports and SD ports to allow users to easily download images to thumb drives, SD cards, or portable hard drives. Includes: Blaster's Ranger II™ High Speed Camera with internal rechargeable battery, 12.5-75mm f/1.2 (2/3 in. format) C-mount Zoom Lens, ProAnalyst® TrackOne Edition Software which allows auto-tracking of one feature and/or manually tracking of up to 32 features and exporting to Microsoft Excel™ for further analysis and graphing, Blaster's Ranger II™ Tripod, Blaster's Ranger II™ Trigger Switch, 16 GB SDHC card for non-volatile storage of recorded video, SDHC Card Reader, USB-2 Communications Cable, Power Adapters and cables for external DC and AC operation, Blaster's Ranger II™ Operations Manual (English), Blaster's Ranger II™ Carry Case. Includes MREL's 1 year Comprehensive 100% Parts and Labour Warranty.

Optional Upgrades (not included):

Blaster's Ranger II™ Memory Upgrade (Products 1-53-49, 1-53-50): Upgrade the internal memory to 4GB or 8GB thus increasing the recording time of the camera.

Blaster's Ranger II™ Built-in Solid State Drive (Products 1-53-51 to 1-53-53): Internal SSDs of 64 GB, 128 GB, or 256 GB to store multiple videos directly on the camera without need of a computer.

Optional Accessories (not included):

Blaster's Ranger II™ Battery and Charger (Product 1-53-54): Provides portable external 12 VDC power for long operation times.

Blaster's Ranger II™ F-Mount Adapter (Product 1-53-55): Allows use of F-Mount lenses with the Blaster's Ranger II™ High Speed Cameras.

Blaster's Ranger II™ LCD Hood (Product 1-53-56): Provides a removeable hood for velcro attachment to the Blaster's Ranger II™ High Speed Camera to reduce glare from sunlight.

PWT™ Portable Wireless Trigger (Product 1-51-01): To command-trigger the camera wirelessly from up to 500 m (1,640 ft.) distance.

ProAnalyst® Professional Edition (Product 1-50-03): Includes all the analysis features and engines for auto-tracking objects in 1-D and 2-D, data reduction and report generation.

ProAnalyst® 3-D Professional Edition (Product 1-50-04): Includes all the features of the Professional Edition, plus the 3-D Manager. Analyze events captured by multiple cameras to reconstruct and display motion in 3-D with accuracy.

ProAnalyst® Image Stabilization Toolkit (Product 1-50-05): A recommended toolkit for the ProAnalyst® Professional Editions which removes unwanted jitter and vibration from a video.

Other Lenses: A wide variety of C-Mount lenses to meet specific requirements - contact MREL.

1-53-46	BLASTER'S RANGER II™ HIGH SPEED CAMERA (800x600/COLOUR/2GB)	each	
<p>Blaster's Ranger II™ Model RAll-LC2-O: Rugged (machined aluminum), portable, colour (1,600 ISO), high speed video camera with built-in, ultra-bright 178 mm (7 in.) WVGA LCD viewfinder and push-button controls. Maximum recording speed = 1,250 fps. Maximum horizontal x vertical resolution at all speeds = 800 x 600 pixels. Recording time of 4.5 seconds at 1000 fps at maximum resolution. Operation from internal rechargeable battery (3 hrs.), external 10-30 VDC, or 110-220 VAC. USB ports and SD ports to allow users to easily download images to thumb drives, SD cards, or portable hard drives. Includes: Blaster's Ranger II™ High Speed Camera with internal rechargeable battery, 12.5-75mm f/1.2 (2/3 in. format) C-mount Zoom Lens, ProAnalyst® TrackOne Edition Software which allows auto-tracking of one feature and/or manually tracking of up to 32 features and exporting to Microsoft Excel™ for further analysis and graphing, Blaster's Ranger II™ Tripod, Blaster's Ranger II™ Trigger Switch, 16 GB SDHC card for non-volatile storage of recorded video, SDHC Card Reader, USB-2 Communications Cable, Power Adapters and cables for external DC and AC operation, Blaster's Ranger II™ Operations Manual (English), Blaster's Ranger II™ Carry Case. Includes MREL's 1 year Comprehensive 100% Parts and Labour Warranty.</p>			
<p><u>Optional Upgrades (not included):</u></p>			
<p>Blaster's Ranger II™ Memory Upgrade (Products 1-53-49, 1-53-50): Upgrade the internal memory to 4GB or 8GB thus increasing the recording time of the camera.</p>			
<p>Blaster's Ranger II™ Built-in Solid State Drive (Products 1-53-51 to 1-53-53): Internal SSDs of 64 GB, 128 GB, or 256 GB to store multiple videos directly on the camera without need of a computer.</p>			
<p><u>Optional Accessories (not included):</u></p>			
<p>Blaster's Ranger II™ Battery and Charger (Product 1-53-54): Provides portable external 12 VDC power for long operation times.</p>			
<p>Blaster's Ranger II™ F-Mount Adapter (Product 1-53-55): Allows use of F-Mount lenses with the Blaster's Ranger II™ High Speed Cameras.</p>			
<p>Blaster's Ranger II™ LCD Hood (Product 1-53-56): Provides a removeable hood for velcro attachment to the Blaster's Ranger II™ High Speed Camera to reduce glare from sunlight.</p>			
<p>PWT™ Portable Wireless Trigger (Product 1-51-01): To command-trigger the camera wirelessly from up to 500 m (1,640 ft.) distance.</p>			
<p>ProAnalyst® Professional Edition (Product 1-50-03): Includes all the analysis features and engines for auto-tracking objects in 1-D and 2-D, data reduction and report generation.</p>			
<p>ProAnalyst® 3-D Professional Edition (Product 1-50-04): Includes all the features of the Professional Edition, plus the 3-D Manager. Analyze events captured by multiple cameras to reconstruct and display motion in 3-D with accuracy.</p>			
<p>ProAnalyst® Image Stabilization Toolkit (Product 1-50-05): A recommended toolkit for the ProAnalyst® Professional Editions which removes unwanted jitter and vibration from a video.</p>			
<p>Other Lenses: A wide variety of C-Mount lenses to meet specific requirements - contact MREL.</p>			

1-53-47	BLASTER'S RANGER II™ HIGH SPEED CAMERA (1280x1024/MONO/4GB)	each	
<p>Blaster's Ranger II™ Model RAI-SM4-O: Rugged (machined aluminum), portable, monochrome (3,200 ISO), high speed video camera with built-in, ultra-bright 178 mm (7 in.) WVGA LCD viewfinder and push-button controls. Maximum recording speed = 2,000 fps. Maximum horizontal x vertical resolution at all speeds up to 500 fps = 1280 x 1024 pixels. Recording time of 6.5 seconds at 500 fps at maximum resolution. Recording time of 6.5 seconds at 1000 fps at resolution of 1280 x 516 pixels. Operation from internal rechargeable battery (3 hrs.), external 10-30 VDC, or 110-220 VAC. USB ports and SD ports to allow users to easily download images to thumb drives, SD cards, or portable hard drives. Includes: Blaster's Ranger II™ High Speed Camera with internal rechargeable battery, 16-160mm f/2.0 (1 in. format) C-mount Zoom Lens, ProAnalyst® TrackOne Edition Software which allows auto-tracking of one feature and/or manually tracking of up to 32 features and exporting to Microsoft Excel™ for further analysis and graphing, Blaster's Ranger II™ Tripod, Blaster's Ranger II™ Trigger Switch, 16 GB SDHC card for non-volatile storage of recorded video, SDHC Card Reader, USB-2 Communications Cable, Power Adapters and cables for external DC and AC operation, Blaster's Ranger II™ Operations Manual (English), Blaster's Ranger II™ Carry Case. Includes MREL's 1 year Comprehensive 100% Parts and Labour Warranty.</p>			
<p><u>Optional Upgrades (not included):</u></p>			
<p>Blaster's Ranger II™ Memory Upgrade (Products 1-53-49, 1-53-50): Upgrade the internal memory to 4GB or 8GB thus increasing the recording time of the camera.</p>			
<p>Blaster's Ranger II™ Built-in Solid State Drive (Products 1-53-51 to 1-53-53): Internal SSDs of 64 GB, 128 GB, or 256 GB to store multiple videos directly on the camera without need of a computer.</p>			
<p><u>Optional Accessories (not included):</u></p>			
<p>Blaster's Ranger II™ Battery and Charger (Product 1-53-54): Provides portable external 12 VDC power for long operation times.</p>			
<p>Blaster's Ranger II™ F-Mount Adapter (Product 1-53-55): Allows use of F-Mount lenses with the Blaster's Ranger II™ High Speed Cameras.</p>			
<p>Blaster's Ranger II™ LCD Hood (Product 1-53-56): Provides a removeable hood for velcro attachment to the Blaster's Ranger II™ High Speed Camera to reduce glare from sunlight.</p>			
<p>PWT™ Portable Wireless Trigger (Product 1-51-01): To command-trigger the camera wirelessly from up to 500 m (1,640 ft.) distance.</p>			
<p>ProAnalyst® Professional Edition (Product 1-50-03): Includes all the analysis features and engines for auto-tracking objects in 1-D and 2-D, data reduction and report generation.</p>			
<p>ProAnalyst® 3-D Professional Edition (Product 1-50-04): Includes all the features of the Professional Edition, plus the 3-D Manager. Analyze events captured by multiple cameras to reconstruct and display motion in 3-D with accuracy.</p>			
<p>ProAnalyst® Image Stabilization Toolkit (Product 1-50-05): A recommended toolkit for the ProAnalyst® Professional Editions which removes unwanted jitter and vibration from a video.</p>			
<p>Other Lenses: A wide variety of C-Mount lenses to meet specific requirements - contact MREL.</p>			

1-53-48	BLASTER'S RANGER II™ HIGH SPEED CAMERA (1280x1024/COLOUR/4GB)	each	
<p>Blaster's Ranger II™ Model RAI-SC4-O: Rugged (machined aluminum), portable, colour (1,600 ISO), high speed video camera with built-in, ultra-bright 178 mm (7 in.) WVGA LCD viewfinder and push-button controls. Maximum recording speed = 2,000 fps. Maximum horizontal x vertical resolution at all speeds up to 500 fps = 1280 x 1024 pixels. Recording time of 6.5 seconds at 500 fps at maximum resolution. Recording time of 6.5 seconds at 1000 fps at resolution of 1280 x 516 pixels. Operation from internal rechargeable battery (3 hrs.), external 10-30 VDC, or 110-220 VAC. USB ports and SD ports to allow users to easily download images to thumb drives, SD cards, or portable hard drives. Includes: Blaster's Ranger II™ High Speed Camera with internal rechargeable battery, 16-160mm f/2.0 (1 in. format) C-mount Zoom Lens, ProAnalyst® TrackOne Edition Software which allows auto-tracking of one feature and/or manually tracking of up to 32 features and exporting to Microsoft Excel™ for further analysis and graphing, Blaster's Ranger II™ Tripod, Blaster's Ranger II™ Trigger Switch, 16 GB SDHC card for non-volatile storage of recorded video, SDHC Card Reader, USB-2 Communications Cable, Power Adapters and cables for external DC and AC operation, Blaster's Ranger II™ Operations Manual (English), Blaster's Ranger II™ Carry Case.</p> <p>Includes MREL's 1 year Comprehensive 100% Parts and Labour Warranty.</p> <p><u>Optional Upgrades (not included):</u> Blaster's Ranger II™ Memory Upgrade (Products 1-53-49, 1-53-50): Upgrade the internal memory to 4GB or 8GB thus increasing the recording time of the camera. Blaster's Ranger II™ Built-in Solid State Drive (Products 1-53-51 to 1-53-53): Internal SSDs of 64 GB, 128 GB, or 256 GB to store multiple videos directly on the camera without need of a computer.</p> <p><u>Optional Accessories (not included):</u> Blaster's Ranger II™ Battery and Charger (Product 1-53-54): Provides portable external 12 VDC power for long operation times. Blaster's Ranger II™ F-Mount Adapter (Product 1-53-55): Allows use of F-Mount lenses with the Blaster's Ranger II™ High Speed Cameras. Blaster's Ranger II™ LCD Hood (Product 1-53-56): Provides a removeable hood for velcro attachment to the Blaster's Ranger II™ High Speed Camera to reduce glare from sunlight. PWT™ Portable Wireless Trigger (Product 1-51-01): To command-trigger the camera wirelessly from up to 500 m (1,640 ft.) distance. ProAnalyst® Professional Edition (Product 1-50-03): Includes all the analysis features and engines for auto-tracking objects in 1-D and 2-D, data reduction and report generation. ProAnalyst® 3-D Professional Edition (Product 1-50-04): Includes all the features of the Professional Edition, plus the 3-D Manager. Analyze events captured by multiple cameras to reconstruct and display motion in 3-D with accuracy. ProAnalyst® Image Stabilization Toolkit (Product 1-50-05): A recommended toolkit for the ProAnalyst® Professional Editions which removes unwanted jitter and vibration from a video. Other Lenses: A wide variety of C-Mount lenses to meet specific requirements - contact MREL.</p>			
1-53-49	BLASTER'S RANGER II™ MEMORY UPGRADE (2GB TO 4GB)	each	
<p>Increases the image memory of Blaster's Ranger II™ (800x600) models from 2GB to 4GB to increase recording time. Can be added by MREL at any time to Product Numbers: 1-53-45 and 1-53-46.</p>			
1-53-50	BLASTER'S RANGER II™ MEMORY UPGRADE (4GB TO 8GB)	each	
<p>Increases the image memory of all Blaster's Ranger II™ models from 4GB to 8GB to increase recording time. Can be added by MREL at any time to Product Numbers: 1-53-45 to 1-53-48.</p>			
1-53-51	BLASTER'S RANGER II™ BUILT IN SOLID STATE DRIVE (64 GB)	each	
<p>Optional built-in SSD (solid state drive) provides 64 GB of non-volatile internal storage. Shoot all day long without having to download to a computer. Can be factory installed in Products 1-53-45, 1-53-46, 1-53-47 and 1-53-48. Other memory sizes available (See Products 1-53-52 and 1-53-53).</p>			
1-53-52	BLASTER'S RANGER II™ BUILT IN SOLID STATE DRIVE (128 GB)	each	
<p>Optional built-in SSD (solid state drive) provides 128 GB of non-volatile internal storage. Shoot all day long without having to download to a computer. Can be factory installed in Products 1-53-45, 1-53-46, 1-53-47 and 1-53-48. Other memory sizes available (See Products 1-53-51 and 1-53-53).</p>			

1-53-53	BLASTER'S RANGER II™ BUILT IN SOLID STATE DRIVE (256 GB)	each	
Optional built-in SSD (solid state drive) provides 256 GB of non-volatile internal storage. Shoot all day long without having to download to a computer. Can be factory installed in Products 1-53-45, 1-53-46, 1-53-47 and 1-53-48. Other memory sizes available (See Products 1-53-51 and 1-53-52).			
1-53-54	BLASTER'S RANGER II™ BATTERY AND CHARGER	each	
Provides portable 12 VDC power for operating the Blaster's Ranger II™ High Speed Camera at locations that do not have AC mains power. Consists of one sealed, lead acid rechargeable battery (12 VDC, 12AH), one universal (100-240 VAC) battery charger (12 VDC, 0.8A). Connect directly to the Blaster's Ranger II™ High Speed Camera. Suitable for use with Products 1-53-45, 1-53-46, 1-53-47 and 1-53-48.			
1-53-55	BLASTER'S RANGER II™ F-MOUNT ADAPTER	each	
Allows use of F-Mount lenses with the Blaster's Ranger II™ High Speed Cameras. Includes MREL's 1 year Comprehensive 100% Parts and Labour Warranty. Suitable for use with Products 1-53-45, 1-53-46, 1-53-47 and 1-53-48.			
1-53-56	BLASTER'S RANGER II™ LCD HOOD	each	
Provides a removeable hood for velcro attachment to the Blaster's Ranger II™ High Speed Camera to reduce glare from sunlight. Velcro and hood provided. Suitable for use with Products 1-53-45, 1-53-46, 1-53-47 and 1-53-48.			

BLASTER'S RANGER II – ADDITIONAL ACCESSORIES: See Page 11.

BLASTCAM™ HIGH SPEED CAMERA:

HOW TO SELECT THIS PRODUCT:

Decide on a monochrome or color camera. Consider selecting one or more of the Optional Upgrades and Accessories listed below.

Product #	Product Name	Unit	
1-54-02	BLASTCAM™ MODEL BCM2GB-F	each	
<p>BlastCam™ Model BCM2GB-F: Rugged, portable, light sensitive (2500 ASA monochrome), monochrome high speed video camera (10 bit monochrome pixel resolution). 1 to 112,183 frames per second (fps) recording speeds. Maximum horizontal x vertical resolution at all speeds up to 506 fps = 1280 x 1024 pixels. Recording time of 3.3 seconds at 500 fps at maximum resolution. Recording time of 3.3 seconds at 1000 fps at a resolution of 1280 x 512 pixels. Operation from 10-30 VDC or 110-220 VAC. Includes: BlastCam™ High Speed Camera with 80-200mm f/2.8 F-mount Zoom Lens, BlastCam™ Controller, BlastCam™ Control & Playback Software including detection of motion in a selectable field of view to automate triggering, ProAnalyst® TrackOne Edition Software which allows auto-tracking of one feature and/or manually tracking of up to 32 features and exporting to Microsoft Excel™ for further analysis and graphing, BlastCam™ Tripod, BlastCam™ Ethernet Cable, Power Adapters and cables for DC and AC operation, BlastCam™ Operations Manual (English), BlastCam™ Carry Case. Includes MREL's 1 year Comprehensive 100% Parts and Labour Warranty.</p> <p><u>Optional Upgrades (not included):</u> BlastCam™ Camera Cooling Upgrade (Product 1-54-07): To operate camera at high ambient temperatures up to 45°C (113°F).</p> <p><u>Optional Accessories (not included):</u> BlastCam™ C-Mount Adapter (Product 1-54-04): Allows use C-Mount lenses with the BlastCam™ High Speed Cameras. BlastCam™ Battery and Charger (Product 1-54-06): Provides portable external 12 VDC power for long operation times. BlastCam™ Camera Cooling Enclosure (Product 1-54-08): To operate camera at higher ambient temperatures up to 60°C (140°F). BlastCam™ Controller - Extreme Temperatures (Product 1-54-09): Extreme Temperature Controller for the BlastCam™ High Speed Camera. Fully operational from -29°C (-20°F) to 60°C (140°F). BlastCam™ Camera Heating Enclosure (Product 1-54-10): To operate camera at low ambient temperatures down to -29°C (-20°F). BlastCam™ Controller LCD Hood (Product 1-54-11): Provides a removeable hood for velcro attachment to the Controller for the BlastCam™ High Speed Camera to reduce glare from sunlight. PWT™ Portable Wireless Trigger (Product 1-51-01): To command-trigger the camera wirelessly from up to 500 m (1,640 ft.) distance. ProAnalyst® Professional Edition (Product 1-50-03): Includes all the analysis features and engines for auto-tracking objects in 1-D and 2-D, data reduction and report generation. ProAnalyst® 3-D Professional Edition (Product 1-50-04): Includes all the features of the Professional Edition, plus the 3-D Manager. Analyze events captured by multiple cameras to reconstruct and display motion in 3-D with accuracy. ProAnalyst® Image Stabilization Toolkit (Product 1-50-05): A recommended toolkit for the ProAnalyst® Professional Editions which removes unwanted jitter and vibration from a video. Other Lenses: A wide variety of C-Mount lenses to meet specific requirements - contact MREL.</p>			

1-54-03	BLASTCAM™ MODEL BCC2GB-F	each	
<p>BlastCam™ Model BCC2GB-F: Rugged, portable, light sensitive (2000 ASA color), color high speed video camera (RGB color with BAYER-Filter). 1 to 112,183 frames per second (fps) recording speeds. Maximum horizontal x vertical resolution at all speeds up to 506 fps = 1280 x 1024 pixels. Recording time of 3.3 seconds at 500 fps at maximum resolution. Recording time of 3.3 seconds at 1000 fps at a resolution of 1280 x 512 pixels. Operation from 10-30 VDC or 110-220 VAC. Includes: BlastCam™ High Speed Camera with 80-200mm f/2.8 F-mount Zoom Lens, BlastCam™ Controller, BlastCam™ Control & Playback Software including detection of motion in a selectable field of view to automate triggering, ProAnalyst® TrackOne Edition Software which allows auto-tracking of one feature and/or manually tracking of up to 32 features and exporting to Microsoft Excel™ for further analysis and graphing, BlastCam™ Tripod, BlastCam™ Ethernet Cable, Power Adapters and cables for DC and AC operation, BlastCam™ Operations Manual (English), BlastCam™ Carry Case. Includes MREL's 1 year Comprehensive 100% Parts and Labour Warranty.</p> <p><u>Optional Upgrades (not included):</u> BlastCam™ Camera Cooling Upgrade (Product 1-54-07): To operate camera at high ambient temperatures up to 45°C (113°F).</p> <p><u>Optional Accessories (not included):</u> BlastCam™ C-Mount Adapter (Product 1-54-04): Allows use C-Mount lenses with the BlastCam™ High Speed Cameras. BlastCam™ Battery and Charger (Product 1-54-06): Provides portable external 12 VDC power for long operation times. BlastCam™ Camera Cooling Enclosure (Product 1-54-08): To operate camera at higher ambient temperatures up to 60°C (140°F). BlastCam™ Controller - Extreme Temperatures (Product 1-54-09): Extreme Temperature Controller for the BlastCam™ High Speed Camera. Fully operational from -29°C (-20°F) to 60°C (140°F). BlastCam™ Camera Heating Enclosure (Product 1-54-10): To operate camera at low ambient temperatures down to -29°C (-20°F). BlastCam™ Controller LCD Hood (Product 1-54-11): Provides a removeable hood for velcro attachment to the Controller for the BlastCam™ High Speed Camera to reduce glare from sunlight. PWT™ Portable Wireless Trigger (Product 1-51-01): To command-trigger the camera wirelessly from up to 500 m (1,640 ft.) distance. ProAnalyst® Professional Edition (Product 1-50-03): Includes all the analysis features and engines for auto-tracking objects in 1-D and 2-D, data reduction and report generation. ProAnalyst® 3-D Professional Edition (Product 1-50-04): Includes all the features of the Professional Edition, plus the 3-D Manager. Analyze events captured by multiple cameras to reconstruct and display motion in 3-D with accuracy. ProAnalyst® Image Stabilization Toolkit (Product 1-50-05): A recommended toolkit for the ProAnalyst® Professional Editions which removes unwanted jitter and vibration from a video. Other Lenses: A wide variety of C-Mount lenses to meet specific requirements - contact MREL.</p>			
1-54-04	BLASTCAM™ C-MOUNT ADAPTER	each	
<p>Can be attached to the BlastCam™ by the Customer. Allows use of C-Mount lenses with the BlastCam™ High Speed Cameras. Includes MREL's 1 year Comprehensive 100% Parts and Labour Warranty.</p>			
1-54-06	BLASTCAM™ BATTERY AND CHARGER	each	
<p>Provides portable 12 VDC power for operating the BlastCam™ High Speed Camera at locations that do not have AC mains power. Consists of one sealed, lead acid rechargeable battery (12 VDC, 12AH), one universal (100-240 VAC) battery charger (12 VDC, 0.8A). Connect directly to the BlastCam™ High Speed Camera. Suitable for use with Products 1-54-02 and 1-54-03.</p>			
1-54-07	BLASTCAM™ CAMERA COOLING UPGRADE	each	
<p>Optional upgrade for the BlastCam™ High Speed Camera which allows operation of the camera at high ambient temperatures up to 45°C (113°F). Compatible with Products 1-54-02 and 1-54-03. Must be factory installed by MREL. The BlastCam™ Controller - Extreme Temperatures (Product 1-54-09) is also required and provided separately. Consider adding BlastCam™ Camera Cooling Enclosure (Product 1-54-08) to operate the camera at higher ambient temperatures up to 60°C (140°F). Includes MREL's 1 year Comprehensive 100% Parts and Labour Warranty.</p>			

1-54-08	BLASTCAM™ CAMERA COOLING ENCLOSURE	each	
Actively cooled (12 VDC powered) enclosure for the BlastCam™ High Speed Camera. A completely air tight and water tight enclosure allowing the camera to operate at high ambient temperatures up to 60°C (140°F). Provided complete with power cooled enclosure, electrical cord for connecting 12VDC battery (battery not included - see Product 1-54-06), tripod mount adapter and heavy-duty tripod. Compatible with Products 1-54-02 and 1-54-03 which must have Product 1-54-07 installed. The BlastCam™ Controller - Extreme Temperatures (Product 1-54-09) is also required and provided separately. Includes MREL's 1 year Comprehensive 100% Parts and Labour Warranty.			
1-54-09	BLASTCAM™ CONTROLLER - EXTREME TEMPERATURES	each	
Extreme Temperature Controller for the BlastCam™ High Speed Camera. Fully operational from -29°C (-20°F) to 60°C (140°F). Tested in full accordance with MIL-STD-810G this Controller is also rain, drop, sand, dust, humidity and vibration proof. BlastCam™ Control & Playback Software including detection of motion in a selectable field of view to automate triggering is installed. Notes: To operate the BlastCam™ camera at temperatures above 35°C (95°F) Products 1-54-07 and 1-54-08 are also required. To operate the BlastCam™ camera at temperatures below 5°C (41°F) Product 1-54-10 is also required. Includes MREL's 1 year Comprehensive 100% Parts and Labour Warranty.			
1-54-10	BLASTCAM™ CAMERA HEATING ENCLOSURE	each	
Actively heated (12 VDC powered) enclosure for the BlastCam™ High Speed Camera. A completely air tight and water tight enclosure allowing the camera to operate at low ambient temperatures down to -29°C (-20°F). Provided complete with power heated enclosure, electrical cord for connecting 12VDC battery (battery not included - see Product 1-54-06), tripod mount adapter and heavy-duty tripod. Compatible with Products 1-54-02 and 1-54-03. The BlastCam™ Controller - Extreme Temperatures (Product 1-54-09) is also required and provided separately. Includes MREL's 1 year Comprehensive 100% Parts and Labour Warranty.			
1-54-11	BLASTCAM™ CONTROLLER LCD HOOD	each	
Provides a removeable hood for velcro attachment to the Controller for the BlastCam™ High Speed Camera to reduce glare from sunlight. Velcro and hood provided. Suitable for use with Products 1-54-02, 1-54-03 and 1-54-09.			

BLASTCAM – ADDITIONAL ACCESSORIES: See Page 11.

HIGH SPEED CAMERAS – ADDITIONAL ACCESSORIES:

<u>Product #</u>	<u>Product Name</u>	<u>Unit</u>	
1-50-03	PROANALYST® PROFESSIONAL EDITION SOFTWARE (1 LICENSE)	each	
<p>ProAnalyst® is the world's premier software package for automatically measuring moving objects with video. ProAnalyst® allows you to import virtually any video and quickly extract and quantify motion within that video. Used extensively by NASA, engineers, broadcasters, researchers and athletes, ProAnalyst® is the ideal companion software to any high speed video camera. This ProAnalyst® Professional Edition Software package is the industry-standard. Includes all the analysis features and engines for auto-tracking objects in 1-D and 2-D, data reduction and report generation. Optional toolkits add particle tracking, contour tracing, and image stabilization.</p>			
1-50-04	PROANALYST® 3-D PROFESSIONAL EDITION SOFTWARE (1 LICENSE)	each	
<p>ProAnalyst® is the world's premier software package for automatically measuring moving objects with video. ProAnalyst® allows you to import virtually any video and quickly extract and quantify motion within that video. Used extensively by NASA, engineers, broadcasters, researchers and athletes, ProAnalyst® is the ideal companion software to any high speed video camera. ProAnalyst® Professional Edition is the industry-standard. Includes all the analysis features and engines for auto-tracking objects in 1-D and 2-D, data reduction and report generation. This ProAnalyst® 3-D Professional Edition Software package is the ultimately flexible motion analysis software package. It includes all the features of the Professional Edition, plus the innovative and simple-to-use 3-D Manager. Analyze events captured by multiple cameras to reconstruct and display motion in 3-D with high precision and accuracy.</p> <p>Optional Versions (not included):</p> <p>3-D FLIGHT PATH: Using two fixed camera views, analyze and reconstruct the 3-D motion of projectiles and bullets, including pitch, yaw, relative position and deviation from a desired flight line. Ideal for ballistics engineers and military range environments. Contact MREL for more information.</p> <p>3-D TRACKER: Using two cameras and two flight trackers, measure and reconstruct 3-D motion of projectiles and rockets over a long distance, measures motion of multiple objects including sabot and ordnance separations over 100 m (328 ft.) or more using high speed cameras. Contact MREL for more information.</p>			
1-50-05	PROANALYST® IMAGE STABILIZATION TOOLKIT	each	
<p>A recommended toolkit for the ProAnalyst® Professional Editions (Products 1-50-03 and 1-50-04) which removes unwanted jitter and vibration from a video. Simply select features within the image to stabilize upon and ProAnalyst® will create a new, stabilized video for later analysis. Great for vibration environments, hand-held jitter, airborne testing, frequency analysis and more.</p>			
1-51-01	PWT™ PORTABLE WIRELESS TRIGGER	each	
<p>2.4 GHz Transmitter/Receiver pair, providing wireless remote triggering of instrumentation such as high-speed cameras. This radio frequency approved for use in North America and throughout the world. Utilizes Frequency Hopping Spread Spectrum Technology to provide superior signal reliability. 50 mW transmission power, up to 500 m (1,640 ft.) range "line of sight". Includes Transmitter, folding antenna, push button trigger switch, 120 VAC or 230 VAC Battery Charger (as specified by Customer), adapter for external 6 VDC. Includes Receiver, folding antenna, 120 VAC or 230 VAC Battery Charger (as specified by Customer), adapter for external 6 VDC. Padded Carry Case. Includes 2 professional tripods with pistol grip action camera ball mounts. Colour Operations Manual (English or Spanish as specified by Customer). Training video on DVD. Includes MREL's 1 year Comprehensive 100% Parts and Labour Warranty.</p>			

1-51-03	PWT™ PORTABLE WIRELESS TRIGGER ADDITIONAL RECEIVER	each	
Additional 2.4 GHz Receiver for use with Product 1-51-01. Programmed to match Transmitter. Provides remote triggering at an additional location. This radio frequency approved for use in North America and throughout the world. Utilizes Frequency Hopping Spread Spectrum Technology to provide superior signal reliability. Includes Receiver, folding antenna, 120 VAC or 230 VAC Battery Charger (as specified by Customer), adapter for external 6 VDC. Includes 1 professional tripod with pistol grip action camera ball mount. Maximum of 4 Receivers per Transmitter. Includes MREL's 1 year Comprehensive 100% Parts and Labour Warranty.			
LENSES	HIGH SPEED C-MOUNT AND F-MOUNT LENSES	each	
MREL supplies a variety of high speed zoom and fixed focal length lenses to suit a variety of high speed video recording applications. Tell us about your application and your camera and MREL will recommend one or more appropriate zoom or fixed focal length high speed lenses.			

ADDITIONAL INFORMATION:

More information on MREL's Blaster's Ranger II™ High Speed Camera, BlastCam™ High Speed Camera, PWT™ Portable Wireless Trigger and ProAnalyst™ Software is available online at www.mrel.com.

For more information or to request a formal quotation please contact your local Authorized MREL Blasting Instrumentation Distributor, or MREL's Blasting Instrumentation Department:

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