

Desktop (Windows) Specifications**Desktops, Standard**

Spec Item #	Product Attribute	Minimum Requirements
DS-1	Standard Desktop	Shall meet/include the following: <ul style="list-style-type: none"> • Business Class • EPEAT Silver • Energy Star (current version) • Mouse and keyboard
DS-2	Operating System:	Microsoft® Windows® 10 Pro (64-bit)
DS-3	Chassis:	Mini/Tiny/Micro Form Factor (M/TFF/M)
DS-4	Processor:	Functionally equivalent (or better) to: Intel Core i5 (10th generation or later)
DS-5	Memory:	<ul style="list-style-type: none"> • 8GB (upgradeable to 16 GB) • DDR4 (or newer) • Non-ECC
DS-6	Video:	Support: <ul style="list-style-type: none"> • DirectX 11 (or later) • Dual monitor support (any combination of DisplayPort, HDMI, and/or USB-C)
DS-7	Storage:	120GB SSD
DS-8	Network Connection:	<ul style="list-style-type: none"> • RJ45 • 10/100/1000 Ethernet
DS-10	Warranty:	3 Year Limited Warranty plus 3 Year NBD On-Site Service (CA Statewide)
DS-11	Processor Option:	Functionally equivalent (or better) to: Intel Core i5 vPro (10th generation or later), if available
DS-12	Processor Option:	Functionally equivalent (or better) to: Intel Core i7 (10th generation or later)
DS-13	Memory Option:	16GB, DDR4 (or newer), Non-ECC
DS-14	Storage Option:	240GB SSD
DS-15	Storage Option:	480GB SSD
DS-16	Chassis Option:	Small Form Factor (SFF)
DS-17	Wi-Fi Option	802.11 ac (or later)
DS-18	Security Option:	TPM 2.0 (or later) functionality

Desktop (Windows) Specifications**Desktops, Power**

Spec Item #	Product Attribute	Minimum Requirements
DP-1	Power Desktop	Shall meet/include the following: <ul style="list-style-type: none"> • Business Class • EPEAT Silver • Energy Star (current version) • Mouse and keyboard
DP-2	Operating System:	Microsoft® Windows® 10 Pro (64-bit)
DP-3	Chassis:	Mini/Tiny/Micro Form Factor (M/TFF/M)
DP-4	Processor:	Functionally equivalent (or better) to Intel Core i7 (10th generation)
DP-5	Memory:	<ul style="list-style-type: none"> • 16GB (upgradeable to 32 GB) • DDR4 (or newer) • Non-ECC
DP-6	Video:	Support: <ul style="list-style-type: none"> • DirectX 11 (or later) • Dual monitor support (any combination of DisplayPort, HDMI, and/or USB-C)
DP-7	Storage:	120GB SSD
DP-8	Network Connection:	<ul style="list-style-type: none"> • RJ45 • 10/100/1000 Ethernet
DP-10	Warranty:	3 Year Limited Warranty plus 3 Year NBD On-Site Service (CA Statewide)
DP-11	Processor Option:	Functionally equivalent (or better) to: Intel Core i7 vPro (10th generation or later), if available
DP-12	Memory Option:	32GB, DDR4 (or newer), Non-ECC
DP-13	Storage Option:	240GB SSD
DP-14	Storage Option:	480GB SSD
DP-15	Chassis Option:	Small Form Factor (SFF)
DP-16	Wi-Fi Option	802.11 ac (or later)
DP-17	Security Option:	TPM 2.0 (or later) functionality

Desktop (Windows) Specifications**Desktops, Workstation**

Spec Item #	Product Attribute	Minimum Requirements
DW-1	Workstation:	Shall meet/include the following: <ul style="list-style-type: none"> • Business Class • EPEAT Silver • Energy Star (current version) • Mouse and keyboard
DW-2	Operating System:	Microsoft® Windows® 10 Pro (64-bit)
DW-3	Chassis:	Tower
DW-4	Processor:	Functionally equivalent (or better) to: Intel Xeon W or Xeon Silver
DW-5	Memory:	<ul style="list-style-type: none"> • 16GB (upgradeable to 32 GB) • DDR4 (or newer) • ECC RDIMM (or equivalent)
DW-6	Video:	<ul style="list-style-type: none"> • Discreet Video Card 2GB GDDR5 (or newer) - professional grade • Dual monitor support (any combination of DisplayPort, HDMI, or USB-C)
DW-7	Storage:	240GB SSD
DW-8	Network Connection:	<ul style="list-style-type: none"> • RJ45 • 10/100/1000 Ethernet
DW-10	Upgrade Slots:	3 PCIe or newer
DW-11	Warranty:	3 Year Limited Warranty plus 3 Year NBD On-Site Service (CA Statewide)
DW-12	Processor Option:	Functionally equivalent (or better) to: Intel Xeon W vPro, if available
DW-13	Memory Option:	32GB, DDR4 (or newer), ECC RDIMM
DW-14	Storage Option:	480GB SSD
DW-15	Video Option:	<ul style="list-style-type: none"> • Discreet Video Card 4GB GDDR5 (or newer) - professional grade • Dual monitors (DisplayPort, HDMI, and/or USB-C)
DW-16	Wi-Fi Option	802.11 ac (or later)
DW-17	Security Option:	TPM 2.0 (or later) functionality

Desktop (Windows) Specifications

Desktops - All-In-One

Spec Item #	Product Attribute	Minimum Requirements
DA-1	All-In-One Desktop	Shall meet/include the following: <ul style="list-style-type: none"> • Business Class • EPEAT Silver • Energy Star (current version) • Mouse and keyboard
N/A	MSRP SKU/Part #	List the part #/sku of the offered make and model from the OEM MSRP/Price List
DA-2	Operating System:	Microsoft® Windows® 10 Pro (64-bit)
DA-3	Chassis:	All-In-One Desktop
DA-4	Processor:	Functionally equivalent (or better) to: Intel Core i5 10th generation)
DA-5	Memory:	<ul style="list-style-type: none"> • 8GB (upgradeable to 16 GB) • DDR4 (or newer) • Non-ECC
DA-6	Video:	Support: <ul style="list-style-type: none"> • DirectX 11 (or later) • Support dual monitors (USB-C, DisplayPort, or HDMI)
DA-7	Storage:	120GB SSD
DA-9	Additional I/O Ports:	<ul style="list-style-type: none"> • 2x USB (or later) • Audio out • Microphone
DA-10	Speaker:	Internal Audio Speaker
DA-11	Display:	<ul style="list-style-type: none"> • Size: 21.5" (diagonal) • FHD
DA-12	Warranty:	3 Year Limited Warranty plus 3 Year NBD On-Site Service (CA Statewide)

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Thin/Zero Client Desktop Specifications**Desktop, Thin-Client**

Spec Item #	Product Attribute	Minimum Requirements
DT-1	Thin Client:	Shall meet/include the following: <ul style="list-style-type: none"> • Business Class • EPEAT Silver • Energy Star (current version) • Keyboard and Mouse
DT-2	Chassis:	Mini/Tiny/Nano
DT-3	Operating System:	Open
DT-4	Client Software:	Preinstalled with (minimum): <ul style="list-style-type: none"> • Remote Desktop Protocol (RDP) or similar • Media Player • Flash file player
DT-5	Processor:	Minimum: <ul style="list-style-type: none"> • Two Cores
DT-6	System Memory:	<ul style="list-style-type: none"> • 4 GB (upgradeable to 8 GB) • DDR3 (or newer) • non-ECC
DT-7	Storage:	16GB
DT-8	Video Output:	Single or Dual monitor support (any combination of USB-C, DisplayPort, or HDMI). Adapter(s) acceptable to meet requirement.
DT-9	Network Connection:	<ul style="list-style-type: none"> • RJ45 • 10/100/1000 Ethernet
DT-10	Additional I/O Ports:	<ul style="list-style-type: none"> • 2x USB (or later) • Audio out • Microphone
DT-11	Warranty:	3 Year Limited Warranty plus 3 Years Exchange service
DT-12	Memory Option	8GB, DDR3 (or newer), Non-ECC
DT-13	Wi-Fi Option:	802.11ac (or later)
DT-14	Security Option	TPM 2.0 (or later) functionality
DT-15	Storage Option	32GB

Thin/Zero Client Desktop Specifications**Desktop, Zero-Client**

Spec Item #	Product Attribute	Minimum Requirements
DZ-1	Zero-Client	Shall meet/include the following: <ul style="list-style-type: none"> • Business Class • Keyboard and Mouse
DZ-2	Chassis:	Mini/Tiny
DZ-3	Processor:	PCoIP Zero Client or equivalent
DZ-4	System Memory:	512MB DDR3 (or newer)
DZ-5	Flash Memory:	32MB
DZ-6	Video Output:	Dual monitor support (any combination of USB-C, DisplayPort, or HDMI). Adapter(s) acceptable to meet requirement.
DZ-7	Network Connection:	<ul style="list-style-type: none"> • RJ45 • 10/100/1000 Ethernet
DZ-8	Additional I/O Ports:	<ul style="list-style-type: none"> • 2x USB (or later) • Audio out • Microphone
DZ-9	Warranty:	3 Year Limited Warranty plus 3 Year Exchange Service

Laptops (Windows) Specifications**Laptops, Standard**

Spec Item #	Product Attribute	Minimum Requirements
LS-1	Standard Laptop	Shall meet/include the following: <ul style="list-style-type: none"> • Business Class • EPEAT Silver • Energy Star (current version)
LS-2	Display:	<ul style="list-style-type: none"> • 14" (diagonal) • LED • HD
LS-3	Operating System:	Microsoft® Windows® 10 Pro (64-bit)
LS-4	Processor:	Functionally equivalent (or better) to: Intel Core i5 (11th generation)
LS-5	Memory:	<ul style="list-style-type: none"> • 8GB (upgradeable to 16 GB) • DDR4 (or newer) • Non-ECC
LS-6	Video:	Support: <ul style="list-style-type: none"> • Direct X11 (or later)
LS-7	Storage:	240 GB SSD
LS-8	Network Connection (on laptop or compatible docking station):	<ul style="list-style-type: none"> • RJ45 • 10/100/1000 Ethernet
LS-9	Wireless:	<ul style="list-style-type: none"> • 802.11 ac (or later) • Bluetooth 5.0 (or later)
LS-10	Additional I/O Ports:	<ul style="list-style-type: none"> • 2 x USB (or later) • 1 x video out (DisplayPort, HDMI, or USB-C) • Audio Out • Microphone in • Docking Port
LS-11	Audio:	Integrated audio with speaker
LS-12	Battery:	42 Wh
LS-13	Weight:	6 Pounds (Maximum)
LS-14	Docking Station:	Support a docking station option that supports laptop recharging.
LS-15	Warranty:	3 Year Limited Warranty plus 3 Year NBD On-Site Service (CA Statewide)
LS-17	Processor Option:	Functionally equivalent (or better) to: Intel Core i7 (11th generation or later)
LS-18	Memory Option:	16GB, DDR4 (or newer), Non-ECC
LS-19	Storage Option:	480GB SSD
LS-20	Display Option:	<ul style="list-style-type: none"> • 15" (diagonal) • LED • HD
LS-21	Display Option:	<ul style="list-style-type: none"> • 14" (diagonal) • Touchscreen • HD
LS-22	Security Option:	TPM 2.0 (or later) functionality

Laptops (Windows) Specifications**Laptops, Power**

Spec Item #	Product Attribute	Minimum Requirements
LP-1	Power Laptop	Shall meet/include the following: • Business Class • EPEAT Silver • Energy Star (current version)
LP-2	Screen:	• 14" (diagonal) • LED • HD
LP-3	Operating System:	Microsoft® Windows® 10 Pro (64-bit)
LP-4	Processor:	Functionally equivalent (or better) to: Intel Core i7 (11th generation)
LP-5	Memory:	• 16GB (upgradeable to 32 GB) • DDR4 (or newer) • Non-ECC
LP-6	Video:	Support: • Direct X11 (or later)
LP-7	Storage:	240 GB SSD
LP-8	Network Connection (on laptop or compatible docking station):	• RJ45 • 10/100/1000 Ethernet
LP-9	Wireless:	• 802.11 ac (or later) • Bluetooth 5.0 (or later)
LP-10	Additional I/O Ports:	• 2 x USB (or later) • 1 x video out (DisplayPort, HDMI, or USB-C) • Audio Out • Microphone in • Docking Port
LP-11	Audio:	Integrated audio with speaker
LP-12	Battery:	42 Wh
LP-13	Weight:	6 Pounds (Maximum)
LP-14	Docking Station:	Support a docking station option that supports laptop recharging.
LP-15	Warranty:	3 Year Limited Warranty plus 3 Year NBD On-Site Service (CA Statewide)
LP-17	Memory Option:	32GB, DDR4 (or newer), Non-ECC
LP-18	Storage Option:	480GB SSD
LP-19	Display Option:	• 15" (diagonal) • LED • HD
LP-20	Display Option:	• 14" (diagonal) • Touchscreen • HD
LP-21	Security Option:	TPM 2.0 (or later) functionality

Laptops (Windows) Specifications**Laptops, Ultralight**

Spec Item #	Product Attribute	Minimum Requirements
LU-1	Ultralight Laptop	Shall meet/include the following: <ul style="list-style-type: none"> • Business Class • EPEAT Silver • Energy Star (current version)
LU-2	Screen:	<ul style="list-style-type: none"> • 11.6" (diagonal) • LED • HD • Anti-glare
LU-3	Operating System:	Microsoft® Windows® 10 Pro (64-bit)
LU-4	Processor:	Functionally equivalent (or better) to: Intel Core i5 (11th generation)
LU-5	Memory:	<ul style="list-style-type: none"> • 8GB (upgradeable to 16 GB) • DDR4 (or newer) • Non-ECC
LU-6	Video:	Support: <ul style="list-style-type: none"> • Direct X11 (or later)
LU-7	Storage:	120 GB SSD
LU-8	Network Connection (on laptop or compatible docking station):	<ul style="list-style-type: none"> • RJ45 • 10/100/1000 Ethernet
LU-9	Wireless:	<ul style="list-style-type: none"> • 802.11 ac (or later) • Bluetooth 5.0 (or later)
LU-10	Additional I/O Ports:	<ul style="list-style-type: none"> • 2 x USB (or later) • 1 x video out (DisplayPort, HDMI, or USB-C) • Audio Out • Microphone in • Docking Port
LU-11	Audio:	Integrated audio with speaker
LU-12	Battery:	42 Wh
LU-13	Weight:	4 Pounds (Maximum)
LU-14	Port Replicator:	Must support a port replicator option that supports notebook recharging.
LU-16	Processor Option:	Functionally equivalent (or better) to: Intel Core i5 vPro (11th generation or later), if available
LU-17	Processor Option:	Functionally equivalent (or better) to: Intel Core i7 (11th generation or later)
LU-18	Memory Option:	16GB, DDR4 (or newer), Non-ECC
LU-19	Storage Option:	240GB SSD
LU-20	Security Option:	TPM 2.0 (or later) functionality

Laptops (Windows) Specifications**Laptops, Mobile Workstation**

Spec Item #	Product Attribute	Minimum Requirements
LM-1	Mobile Workstation Laptop:	Shall meet/include the following: <ul style="list-style-type: none"> • Business Class • EPEAT Silver • Energy Star (current version)
LM-2	Screen:	<ul style="list-style-type: none"> • 15" (diagonal) • LED • HD
LM-3	Operating System:	Microsoft® Windows® 10 Pro (64-bit)
LM-4	Processor:	Functionally equivalent (or better) to: Intel Core i7 (11th generation)
LM-5	Memory:	<ul style="list-style-type: none"> • 16GB (upgradeable to 32 GB) • DDR4 (or newer) • Non-ECC
LM-6	Video:	Video card must be: <ul style="list-style-type: none"> • discreet professional grade • 2GB GDDR5 (or newer) • support DirectX 11 (or later)
LM-7	Storage:	240 GB SSD
LM-8	Network Connection (on laptop or compatible docking station):	<ul style="list-style-type: none"> • RJ45 • 10/100/1000 Ethernet
LM-9	Wireless:	<ul style="list-style-type: none"> • 802.11 ac (or later) • Bluetooth 5.0 (or later)
LM-10	Additional I/O Ports:	<ul style="list-style-type: none"> • 2 x USB (or later) • 1 x video out (DisplayPort, HDMI, or USB-C) • Audio Out • Microphone in • Docking Port
LM-11	Audio:	Integrated audio with speaker
LM-12	Battery:	55 Wh
LM-13	Weight:	8 Pounds (Maximum)
LM-15	Warranty:	3 Year Limited Warranty plus 3 Year NBD On-Site Service (CA Statewide)
LM-16	Processor Option:	Functionally equivalent (or better) to: Intel Core i7 vPro (11th generation or later), if available
LM-17	Memory Option:	32GB, DDR4 (or newer), Non-ECC
LM-18	Storage Option:	480GB SSD
LM-19	Battery Option:	80 Wh
LM-20	Display Option:	<ul style="list-style-type: none"> • 17" (diagonal) • LED • HD
LM-21	Display Option:	<ul style="list-style-type: none"> • 15" (diagonal) • Touchscreen • HD
LM-22	Video Option:	<ul style="list-style-type: none"> • discreet professional grade • 4GB GDDR5 (or newer) • support DirectX 11 (or later)
LM-23	Security Option:	TPM 2.0 (or later) functionality

Thin-Client Laptop Specifications**Laptop, Thin Client**

Spec Item #	Product Attribute	Minimum Requirements
DT-1	Thin Client Laptop:	Shall meet/include the following: <ul style="list-style-type: none"> • Business Class • EPEAT Silver • Energy Star (current version)
DT-2	Display:	<ul style="list-style-type: none"> • 13" (diagonal) • LCD or LED • HD
DT-3	Operating System:	Open
DT-4	Client Software:	Preinstalled with (minimum): <ul style="list-style-type: none"> • Remote Desktop Protocol (RDP) or similar • Media Player • Adobe Flash Player 10
DT-5	Processor:	Minimum: <ul style="list-style-type: none"> • Two Cores
DT-6	Memory:	<ul style="list-style-type: none"> • 4 GB (upgradeable to 8 GB) • DDR3 (or newer) • non-ECC
DT -7	Storage:	16GB
DT-8	Video:	Includes video out (DisplayPort, USB-C, and/or HDMI)
DT-9	Network Connection:	<ul style="list-style-type: none"> • RJ45 • 10/100/1000 Ethernet
DT-10	Wireless:	<ul style="list-style-type: none"> • 802.11ac (or later) • Bluetooth 5.0 (or later)
DT-11	Additional I/O Ports:	<ul style="list-style-type: none"> • 2x USB (or later) • Audio out • Microphone
DT-12	Battery:	42Wh
DT-13	Weight:	5lbs (maximum)
DT-14	Warranty:	3 Year Limited Warranty plus 3 Years Exchange service
DT-15	Memory Option:	8GB, DDR3 (or newer), Non-ECC
DT-17	Storage Option	32GB

Chromebook Specifications

Chromebook, Education

Spec Item #	Product Attribute	Minimum Requirements
CED-1	Chromebook:	Shall meet/include the following: <ul style="list-style-type: none"> • EPEAT Silver • Energy Star (current version)
CED-2	Display:	<ul style="list-style-type: none"> • 11" (diagonal) • LED • HD
CED-3	Operating System:	Chrome OS
CED-4	Video:	Supports DirectX 11 or later
CED-5	Processor:	Two Cores
CED-6	Memory:	<ul style="list-style-type: none"> • 4 GB (upgradeable to 8 GB) • DDR3 (or newer) • non-ECC
CED-7	Storage:	32 GB
CED-8	Wireless:	<ul style="list-style-type: none"> • 802.11ac (or later) • Bluetooth 4.0 (or later)
CED-9	Audio:	Integrated audio with speaker
CED-10	Additional I/O Ports:	<ul style="list-style-type: none"> • 2x USB (or later) • Audio out • Microphone
CED-11	Battery:	40Wh
CED-12	Warranty:	3 Year Limited Warranty plus 3 Years Exchange service
CED-13	Memory Option	8GB, DDR3 (or newer), Non-ECC

Chromebook Specifications

Chromebook, Enterprise

Spec Item #	Product Attribute	Minimum Requirements
CEN-1	Chromebook:	Shall meet/include the following: <ul style="list-style-type: none"> • EPEAT Silver • Energy Star (current version)
CEN-2	Display:	<ul style="list-style-type: none"> • 11" (diagonal) • LED • HD
CEN-3	Operating System:	Chrome OS
CEN-4	Video:	Supports DirectX 11 or later
CEN-5	Processor:	Two Cores
CEN-6	Memory:	<ul style="list-style-type: none"> • 4 GB (upgradeable to 8 GB) • DDR3 (or newer) • non-ECC
CEN-7	Storage:	32 GB
CEN-8	Wireless:	<ul style="list-style-type: none"> • 802.11ac (or later) • Bluetooth 4.0 (or later)
CEN-9	Audio:	Integrated audio with speaker
CEN-10	Additional I/O Ports:	<ul style="list-style-type: none"> • 2x USB (or later) • Audio out • Microphone • HDMI
CEN-11	Battery:	40Wh
CEN-12	Warranty:	3 Year Limited Warranty plus 3 Years Exchange service
CEN-13	Memory Option:	8GB, DDR3 (or newer), Non-ECC
CEN-14	Processor Option:	4 cores
CEN-15	Storage Option:	64 GB

Monitor Specifications

Monitors, Widescreen

Spec Item #	Product Attribute	Minimum Requirements
MW-1	Widescreen Monitor	Shall meet/include the following: <ul style="list-style-type: none"> • LED • EPEAT Silver • Energy Star (current version)
MW-2	Size:	18.5" diagonal or larger
MW-3	Aspect Ratio (X:Y):	16:9 (or 16:10)
MW-4	Native Resolution:	FHD
MW-5	Contrast Ratio (Static):	1000 to 1
MW-6	Viewing Angle:	170° horizontal, 160° vertical
MW-7	Video Ports:	At least 2 out of the following 3 inputs: HDMI, DisplayPort, or USB-C
MW-8	Video Cable:	1.8 meter DisplayPort, USB-C, or HDMI cable included
MW-9	Tilt & Height Adjustment:	Adjustable stand w/vertical tilt and height adjustment.
MW-10	Warranty:	Three (3)-year warranty, Exchange replacement

Monitor Specifications

Monitors, Touchscreen

Spec Item #	Product Attribute	Minimum Requirements
MT-1	Touchscreen Monitor	Shall meet/include the following: <ul style="list-style-type: none"> • LED • EPEAT Silver • Energy Star (current version)
MT-2	Size:	18.5" diagonal or larger
MT-3	Aspect Ratio (X:Y):	16:9 (or 16:10)
MT-4	Native Resolution:	FHD
MT-5	Contrast Ratio (Static):	1000 to 1
MT-6	Viewing Angle:	170° horizontal, 160° vertical
MT-7	Video Ports:	At least 2 out of the following 3 inputs: HDMI, DisplayPort, or USB-C
MT-8	Video Cable:	1.8 meter DisplayPort, USB-C, or HDMI cable included
MT-9	Tilt & Height Adjustment:	Adjustable stand w/vertical tilt and height adjustment.
MT-10	Warranty:	Three-year warranty, Exchange replacement (CA Statewide)

Monitor Specifications**Monitors, Curved**

Spec Item #	Product Attribute	Minimum Requirements
MC-1	Curved Monitor	Shall meet/include the following: • LED
MC-2	Size:	21.5" diagonal or larger
MC-3	Aspect Ratio (X:Y):	16:9, 16:10, or wider
MC-4	Native Resolution:	FHD
MC-5	Contrast Ratio (Static):	1000 to 1
MC-6	Viewing Angle:	170° horizontal, 160° vertical
MC-7	Video Ports:	HDMI, DisplayPort, or USB-C
MC-8	Video Cable:	At least 2 out of the following 3 inputs: HDMI, DisplayPort, or USB-C
MC-9	Tilt & Height Adjustment:	Stand w/adjustable vertical height and tilt.
MC-10	Warranty:	Three-year warranty, Exchange Replacement

Monitor Specifications

Monitors, Portable

Portable Monitors will only be offered in laptop categories, where available. They will not be sold in the monitor categories.

Spec Item #	Product Attribute	Minimum Requirements
MP-1	Portable Monitor	Shall meet/include the following: <ul style="list-style-type: none">• LED• EPEAT Silver• Energy Star (current version)
MP-2	Size:	13.5" to 15.5" diagonal
MP-3	Native Resolution:	FHD
MP-4	Contrast Ratio (Static):	600 to 1
MP-5	Viewing Angle:	170° horizontal, 160° vertical
MP-6	Video Ports:	USB-C
MP-7	Video Cable:	1.8 meter USB-C cable included
MP-8	Warranty:	Three-year warranty, Exchange Replacement
MP-9	Stand:	Included
MP-10	Weight:	2 lbs maximum