## ENERGY STAR Set-top Box Product List

List Posted on August 23, 2013

Below are currently qualified ENERGY STAR models available for sale in the U.S. and Canada.

Please note that cable, satellite, and telecom service providers may not carry all models of boxes. Check with your specific service provider for assistance obtaining an ENERGY STAR qualified set-top box.

\* Additional functionalities may be present in the model but not tested by ENERGY STAR.

\*\* In homes that seek to view programming on multiple TVs, EPA wishes to encourage deployment of ENERGY STAR qualified set-top box multi-room configurations because of the significant energy savings this technology offers. Set-top boxes that are part of a multi-room configuration are eligible for a small energy adder considered during qualification. Some manufacturers elect to qualify multi-room enabled set-top boxes for ENERGY STAR without this adder.

\*\*\* The estimate of total energy consumption over a year is calculated based on US average TV viewing patterns.

											Si	ngle-room Config	uration Test Results	S	M	ulti-room Configura	tion Test Results	**		
ENERGY STAR Partner	Brand	Model Name	Model Number	Additional Model Information	Product Type	Enhanced Functionalities Present*	ENERGY STAR Certified for Single-room Operation	ENERGY STAR Certified for Multi-room Operation	Auto-Power Down Available	Deep Sleep State Available	On Mode Power (W)	Sleep Mode Power (W)	Deep Sleep State Power (W)	Total Energy Consumption*** (kWh/yr)	On Mode Power (W)	Sleep Mode Power (W)	Deep Sleep State Power (W)	Total Energy Consumption*** (kWh/yr)	Date Available on Market	Date Qualified
Apple Inc.	Apple	Apple TV	MD199		Internet Protocol (IP)	Advanced Video Processing,High Definition (HD) Resolution,Hom e Network Interface	Yes	No	Yes	No	1.99	0.21		6					3/7/2012	3/7/2012
				(ancillary hardware/ documentation, etc.) RF4CE, ARRIS standard firmware load. RF4CE, ARRIS standard firmware load, NDS Security Requirements.; Moxi	Internet Protocol	Advanced Video Processing,High Definition (HD) Resolution,Hom e Network														
	ARRIS	Media Player			Internet Protocol	Advanced Video Processing,High Definition (HD) Resolution,Hom e Network	Yes			No	6.3			55						9/12/2012
ARRIS Group	ARRIS	MP2000NA	MP2000NA		(IP)	DOCSIS,Advanc ed Video Processing,High Definition (HD) Resolution,Hom e Network	Yes	No	No	No	9.12			80					7/1/2011	9/26/2011
ARRIS Group	ARRIS		MP2050NA		(IP)	Interface ed Video Processing,Digit al Video Recorder (DVR),Multi- Stream - Cable/ Satellite,High Definition (HD) Resolution,Hom e Network	Yes	No	No	No	4.39			38					12/1/2012	12/12/2012
ARRIS Group	Motorola		DCX3501		Cable	Multi- Room,Advanced Video Processing,High Definition (HD) Resolution,Hom e Network	Yes	No	Yes	No	24.9	17.07		170					11/2/2010	10/11/2011
ARRIS Group	Motorola		DCX700-M		Cable	ed Video Processing,Digit al Video Recorder (DVR),Multi- Stream - Cable/ Satellite,High Definition (HD) Resolution,Hom e Network	Yes	No	Yes	No	13.89	10.65		102					6/1/2010	10/11/2011
ARRIS Group	Motorola	Cable Set- Top Box	DCX3510		Cable	Multi- Room,Multi- Stream - Terrestrial/ IP,Advanced Video Processing,High Definition (HD) Resolution,Hom	Yes	No	No	No	21.46	19.14		180					8/2/2011	10/11/2011
ARRIS Group	Motorola		VIP1002		Internet Protocol (IP)	e Network Interface Stream - Terrestrial/ IP,Advanced Video Processing,Digit al Video Recorder (DVR),High Definition (HD) Resolution,Hom	Yes	No	No	No	9.1	9.19		80					12/1/2010	9/9/2011
ARRIS Group	Motorola	IPTV Set- Top Box	VIP1225		Internet Protocol (IP)	e Network	Yes	No	No	No	15.7	11.82		124					12/1/2008	9/9/2011

											s	Single-room Config	guration Test Results	м	ulti-room Configura	ation Test Results	**		
ENERGY STAR Partner	Brand	Model Name	Model Number	Additional Model Information	Product Type	Enhanced Functionalities Present*	ENERGY STAR Certified for Single-room Operation	ENERGY STAR Certified for Multi-room Operation	Auto-Power Down Available	Deep Sleep State Available	On Mode Power (W)		Deep Sleep State Power (W) Consumption*** (kWh/yr)	On Mada Dawar	Sleep Mode	Deep Sleep State Power (W)	Total Energy Consumption*** (kWh/yr)	Date Available on Market	Date Qualified
						Multi- Room,Multi- Stream - Terrestrial/													
		IPTV Set-			Internet Protocol	IP,Advanced Video Processing,High Definition (HD) Resolution,Hom e Network													
ARRIS Group	Motorola		VIP1200		(IP)	Interface Stream - Terrestrial/ IP,Advanced Video	Yes	No	No	No	10.93	10.46	6 94					3/1/2009	9/26/2011
						Processing,Digit al Video Recorder (DVR),High Definition (HD) Resolution,Hom													
ARRIS Group		IPTV Set- Top Box	VIP1232		Internet Protocol (IP)	e Network Interface Multi-	Yes	No	No	No	16.21	12.58	3 129					12/1/2010	9/9/2011
						Room,Multi- Stream - Terrestrial/ IP,Advanced Video Processing,High Definition (HD) Resolution,Hom													
ARRIS Group		IPTV Set- Top Box	VIP2100		Internet Protocol (IP)	e Network Interface Multi-	Yes	No	No	No	9.84	9.63	3 85					12/1/2010	9/26/2011
						Room,Multi- Stream - Terrestrial/ IP,Advanced Video Processing,High Definition (HD)													
ARRIS Group	Motorola	IPTV Set- Top Box	VIP2102		Internet Protocol (IP)	Resolution,Hom e Network Interface Stream - Terrestrial/	Yes	No	No	No	9.84	9.63	8					3/1/2009	9/26/2011
						IP,Advanced Video Processing,Digit al Video Recorder (DVR),High Definition (HD)													
ARRIS Group	Motorola	IPTV Set- Top Box	VIP2250		Internet Protocol (IP)	Resolution,Hom e Network Interface Stream - Terrestrial/	Yes	No	No	No	17.65	14.41	1 143					9/1/2010	9/14/2011
						IP,Advanced Video Processing,Digit al Video Recorder (DVR),High Definition (HD) Resolution,Hom													
ARRIS Group	Motorola	IPTV Set- Top Box	VIP2262		Internet Protocol (IP)	e Network	Yes	No	No	No	17.65	14.41	1 143					9/1/2010	9/14/2011
						Advanced Video Processing,High Definition (HD) Resolution,Hom e Network													
ARRIS Group	Motorola	Set-top Box	QIP7100		Cable	Interface,CableC ARD Multi- Room,Advanced Video	Yes	No	Yes	No	15.3	11.5	5 111					10/2/2009	4/13/2012
						Processing,Digit al Video Recorder (DVR),Multi- Stream - Cable/ Satellite,High Definition (HD)													
ARRIS Group	Motorola	Set-top Box	QIP7232		Cable	Resolution, Cable	No	Yes	Yes	No				21.94	21.59		190	10/2/2009	4/13/2012
					Cable Digital	Advanced Video Processing,High													
ARRIS Group	Motorola Mobility	Set-top Box	HD-DTA100u		Transport Adapter (DTA)	Definition (HD)	Yes	No	No	No	3.93	4.08	3 35					12/3/2012	12/14/2012
						Recorder (DVR),Multi- Stream - Cable/ Satellite,High Definition (HD) Resolution,Hom e Network													
ARRIS Group	Motorola Mobility	Set Top Box	DCX3600		Cable	Interface,CableC ARD Stream - Terrestrial/ IP,Advanced	No	Yes	Yes	No				26.2	21.75		202	12/4/2012	1/22/2013
						Video Processing,Multi -Stream - Cable/ Satellite,High Definition (HD) Resolution,Hom e Network													
ARRIS Group	Motorola Mobility	Set-top Box OCAP	DCX3200P3		Cable	Interface,CableC	Yes	No	Yes	No	13.94	12.41	1 113					6/2/2012	8/24/2012

											S	Single-room Config	guration Test Results	n	lulti-room Configura	ation Test Results	**		
ENERGY STAR Partner	Brand	Model Name	Model Number	Additional Model Information	Product Type	Enhanced Functionalities Present*	ENERGY STAR Certified for Single-room Operation	ENERGY STAR Certified for Multi-room Operation	Auto-Power Down Available	Deep Sleep State Available O	On Mode Power (W)	Sleep Mode Power (W)	Deep Sleep State Power (W) Consumption (kWh/yr)	y *** On Mode Power (W)	Sleep Mode Power (W)	Deep Sleep State Power (W)	Total Energy Consumption*** (kWh/yr)	Date Available on Market	Date Qualified
Cisco Systems	CISCO	8642HD	8642HD		Cable	Multi- Room,DOCSIS, Advanced Video Processing,Digit al Video Recorder (DVR),Multi- Stream - Cable/ Satellite,High Definition (HD) Resolution	Νο	Yes	No	No				24.5	22.9		208	9/1/2011	8/28/2012
Cisco Systems		CIS430 p/n 4034511	CIS430 p/n 4034511		Internet Protocol (IP)	Advanced Video Processing,Digit al Video Recorder (DVR),High Definition (HD) Resolution,Hom e Network Interface	Yes	No	Νο	No	16.6	11.2		126				3/1/2011	8/28/2012
		CIS430 p/n	CIS430 p/n		Internet Protocol	Advanced Video Processing,Digit al Video Recorder (DVR),High Definition (HD) Resolution,Hom e Network													
Cisco Systems	CISCO	4034511-1	4034511-1		(IP)		Yes	No	No	No	16.2	11.6	3	124				3/1/2011	8/28/2012
Cisco Systems	CISCO	DTA 170HD	DTA 170HD		Cable Cable Digital	High Definition (HD) Resolution	Yes	No	No	No	4.9	5.1		43				11/25/2011	8/28/2012
Cisco Systems	CISCO	DTA 171HD	DTA 171HD		Transport Adapter (DTA)	High Definition (HD) Resolution	Yes	No	No	No	4.5	4.4	4					6/18/2012	2/28/2013
Cisco Systems	CISCO	Explorer	Explorer 4642HD		Cable	e Network Interface DOCSIS,Advanc ed Video Processing,High Definition (HD) Resolution,Hom e Network Interface,CableC		No		No	14.9			119					8/28/2012
Cisco Systems	CISCO	4642HDC Explorer	Explorer 4642HDC Explorer 4742HDC		Cable	DOCSIS,Advanc ed Video Processing,High Definition (HD) Resolution,Hom e Network Interface,CableC		No		No	17.5			140					8/28/2012 8/28/2012
Cisco Systems		Explorer	Explorer 4742HDC		Cable	DOCSIS,Advanc ed Video Processing,High Definition (HD) Resolution,Hom e Network Interface,CableC		Yes		No	19.34								2/28/2013
		Explorer	Explorer 8642 HDC			Multi- Room,DOCSIS, Advanced Video Processing,Digit al Video Recorder (DVR),Multi- Stream - Cable/ Satellite,High Definition (HD) Resolution,Cable					13.54	14.30		27.6	24.0				8/28/2012
Cisco Systems			HDC Explorer 8742 HDC		Cable	Cable/ Satellite,Advanc ed Video Processing,Digit al Video Recorder (DVR),High Definition (HD) Resolution,Hom e Network Interface,CableC		Yes		No					21.6			6/1/2010	
Cisco Systems	0000				Cable	ARD	Yes	No	No	No	23	18.3		183				5/1/2011	2/26/2013

											S	Single-room Config	guration Test Result	ts	М	ulti-room Configu	ration Test Results*	•		
ENERGY STAR Partner	Brand	Model Name	Model Number	Additional Model Information	Product Type	Enhanced Functionalities Present*	ENERGY STAR Certified for Single-room Operation	ENERGY STAR Certified for Multi-room Operation	Auto-Power Down Available	Deep Sleep State Available	On Mode Power (W)		Deep Sleep State Power (W)	Total Enormy	On Mode Power (W)	Sleep Mode Power (W)	Dana Olana		Date Available on Market	Date Qualified
Ciese Custome	01000	Explorer			Cable	DOCSIS,Advanc ed Video Processing,High Definition (HD) Resolution,Hom e Network Interface,CableC	Vez	Vas	Yee	Na	20.25	10							2/40/2040	2/20/2042
Cisco Systems		8742HDC	Explorer 8742HDC		Cable	ARD Advanced Video Processing,Digit al Video Recorder (DVR),Multi- Stream - Cable/ Satellite,High Definition (HD) Resolution,Hom e Network	Yes	Yes	Yes	No	22.25	18.	5					0	6/18/2012	2/28/2013
Cisco Systems	CISCO	Explorer 9865HDC	CBLSTB-4042151- K9		Cable	Interface,CableC ARD	No	Yes	Yes	No					26	22.8	8	208 3	3/1/2013	4/15/2013
Cisco Systems	CISCO	Explorer 9865HDC	Explorer 9865HDC		Cable	Multi- Room,DOCSIS, Advanced Video Processing,Digit al Video Recorder (DVR),Multi- Stream - Cable/ Satellite,High Definition (HD) Resolution,Cable CARD	Νο	Yes	Yes	No					27	21.7		204.3	3/1/2013	3/12/2013
						Multi-Stream - Terrestrial/ IP,Advanced Video Processing,High Definition (HD) Resolution,Hom														
Cisco Systems	CISCO	ISB7000	ISB7000	ISB7100,ISB7100,	Internet Protocol (IP)	e Network	Yes	No	No	No	11.8	11.9	9	104				9	9/1/2011	8/28/2012
Cisco Systems	CISCO	ISB7005	ISB7005		Internet Protocol (IP)	Multi-Stream - Terrestrial/ IP,Advanced Video Processing,High Definition (HD) Resolution,Hom e Network Interface	Yes	Νο	Νο	No	11.6	11.4	4	101				q	9/1/2011	8/28/2012
					Internet Protocol	Multi-Stream - Terrestrial/ IP,Advanced Video Processing,High Definition (HD) Resolution,Hom e Network														
Cisco Systems			ISB 7105		(IP)	Multi-Stream - Terrestrial/ IP,Digital Video Recorder (DVR),Advanced Video Processing,High Definition (HD) Resolution,Hom e Network	Yes	No	No	No	11.8			103						12/5/2012
Cisco Systems	CISCO	ISB7150	ISB7150		(IP)	Interface Multi-Stream - Terrestrial/ IP,Advanced Video Processing,Digit al Video Recorder (DVR),High Definition (HD) Resolution,Hom e Network	Yes	No	No	No	17.6	14.	6	143				8	3/1/2012	8/28/2012
Cisco Systems	CISCO	ISB7500	ISB7500	ISB7050,ISB7050,	(IP)	Interface	Yes	No	No	No	18	14.	6	145				9	9/1/2011	8/28/2012
DIRECTV	DIRECTV	DIRECTV	D12-100		Satellite	N/A	Yes	No	No	No	7.86	6.24	4 6.24	. 63	0			8	8/15/2011	8/19/2011
DIRECTV	DIRECTV	DIRECTV C31-700 Client	C31-700		Thin-client/ Remote	Advanced Video Processing,High Definition (HD) Resolution,Hom e Network Interface	Yes	Νο	Νο	No	5.87	4.5	4	47				8	3/1/2012	8/30/2012
DIRECTV	DIRECTV	DIRECTV HD Client	C41-700		Thin-client/ Remote	Advanced Video Processing,High Definition (HD) Resolution,Hom e Network Interface	Yes	Νο	Yes	No	5.5	4.2	2 4.21	40				3	3/1/2013	11/16/2012

											S	Single-room Config	juration Test Result	s	M	lulti-room Configu	ration Test Results'	**		
ENERGY STAR Partner	Brand	Model Name	Model Number	Additional Model Information	Product Type	Enhanced Functionalities Present*	ENERGY STAR Certified for Single-room Operation	ENERGY STAR Certified for Multi-room Operation	Auto-Power Down Available	Deep Sleep State Available	On Mode Power (W)	Sleep Mode Power (W)	Deep Sleep State Power (W)	Total Energy Consumption*** (kWh/yr)	On Mode Power (W)	Sleep Mode Power (W)	Deep Sleep State Power (W)	Total Energy Consumption*** (kWh/yr)	Date Available on Market	Date Qualified
						Multi- Room,Advanced Video														
						Processing,Digit al Video Recorder (DVR),Multi- Stream - Cable/ Satellite,High														
DIRECTV	DIRECTV	DIRECTV HD DVR	HR24-500		Satellite	Definition (HD)	No	Yes	No	No					24.53	22.57		208	3 2/15/2010	9/14/2011
						Processing,Digit al Video Recorder (DVR),Multi- Stream - Cable/ Satellite,High Definition (HD)														
DIRECTV		DIRECTVHD DVR Receiver	HR44-500		Satellite	Resolution,Hom e Network Interface	Yes	Yes	Yes	No	19.7	18.8	3	167					2/7/2013	1/10/2013
						Advanced Video Processing,High Definition (HD)														
DIRECTV	DIRECTV	DirecTV HD Receiver	H24-700		Satellite	Resolution,Hom e Network	Yes	No	Yes	No	13.68	11.52	2 11.54	107	,				5/11/2012	5/31/2012
						Advanced Video Processing,High														
DIRECTV	DIRECTV	DIRECTV HD Receiver	H25-700		Satellite	Definition (HD) Resolution,Hom e Network Interface	Yes	No	Yes	No	9.9	9.15	5 9.15	82					2/4/2012	10/12/2011
						Advanced Video														
		DirecTV HD STB				Processing,High Definition (HD) Resolution,Hom e Network														
DIRECTV	DIRECTV	Receiver	H24-200		Satellite	Interface	Yes	No	No	No	13.99	11.31		113	5				11/10/2011	10/12/2011
		DIRECTV MoCA Client			Thin-client/	Advanced Video Processing,High Definition (HD) Resolution,Hom e Network														
DIRECTV	DIRECTV	Receiver	C41-100		Remote	Interface	Yes	No	Yes	No	6.01	4.56	3	44					4/15/2013	1/4/2013
		DIRECTV																		
DIRECTV	DIRECTV	Receiver	L14-100		Satellite	N/A	Yes	No	No	No	6.84	5.52	2 5.52	55					9/15/2011	8/19/2011
		DirecTV																		
DIRECTV		Satellite	L14-O-700		Satellite	N/A	Yes	No	No	No	5.56	4.39	)	44					9/10/2012	11/14/2012
						Advanced Video Processing,High Definition (HD)														
DIRECTV		DIRECTV Satellite Receiver	H25-500		Satellite	Resolution,Hom e Network Interface	Yes	No	No	No	12.23	10.96	5	103					2/1/2011	9/9/2011
DIRECTV	DIRECTV	DIRECTV SD Receiver	D12-700		Satellite	N/A	Yes	No	No	No	6.27	5.23	3	51					5/1/2008	10/12/2011
DIRECTV	DIRECTV	DirecTV SD Satellite Receiver	L14-A-700		Satellite	N/A	Yes	No	No	No	4.79	3.9	)	39					2/13/2012	1/4/2012

											s	Single-room Config	juration Test Result	s	Мі	ulti-room Configu	ration Test Results <sup>•</sup>	**		
ENERGY STAR Partner	Brand	Model Name	Model Number	Additional Model Information	Product Type	Enhanced Functionalities Present*	ENERGY STAR Certified for Single-room Operation	ENERGY STAR Certified for Multi-room Operation	Auto-Power Down Available	Deep Sleep State Available	On Mode Power (W)	Sleep Mode Power (W)	Deep Sleep State Power (W)	Total Energy Consumption*** (kWh/yr)	On Mode Power (W)	Sleep Mode Power (W)	Deep Sleep State Power (W)	Total Energy Consumption*** (kWh/yr)	Date Available on Market	Date Qualified
														(Kvvinyr)				(KVVII/YI)		
		DIRECTV				Advanced Video Processing,High Definition (HD)														
DIRECTV		Wi-Fi HD Client	C41W-100		Thin-client/ Remote	Resolution,Hom e Network	Yes	No	Yes	No	7.92	6.3	3	59					5/16/2013	1/4/2013
						Advanced Video														
		HD Digital Satellite				Processing,High Definition (HD) Resolution,Hom														
DIRECTV	DIRECTV	Receiver	H25-100		Satellite	e Network Interface	Yes	No	No	No	10.7	10.1		92					5/1/2011	4/28/2011
						Multi- Room,Advanced Video														
						Processing,Multi -Stream - Cable/ Satellite,Digital Video Recorder														
DIRECTV	DIRECTV	HD DVR	HR24-100		Satellite	(DVR),High Definition (HD)	No	Yes	No	No					22.5	22.35		19	07 5/1/2010	7/22/2011
						Multi- Room,Advanced Video														
						Processing,Digit al Video Recorder														
						(DVR),Multi- Stream - Cable/ Satellite,High Definition (HD)														
DIRECTV	DIRECTV	HD DVR	HR24-200		Satellite	Resolution	No	Yes	No	No					23.03	21.03		19	95 10/19/2011	10/14/2011
						Advanced Video														
DISH Network, L.L.C.	Echostar	VIP211Z	VIP211Z		Satellite	Processing,High Definition (HD) Resolution	Yes	No	Yes	No	7.37	6.96	8	61					10/1/2012	9/19/2012
						Advanced Video Processing,High														
EchoStar Technologies						Definition (HD) Resolution,Hom e Network														
L.L.C.	Echostar	6400-2	6400-2		Satellite	Interface	Yes	No	Yes	No	7.4	6.9		61					5/25/2012	5/9/2012
						Advanced Video														
EchoStar						Processing,Digit al Video Recorder (DVR),High														
Technologies	Echostar	9400	9400		Satellite	Definition (HD)	Yes	No	Yes	No	14	13.8	3	122					5/25/2012	5/9/2012
EchoStar Technologies L.L.C.	Echostar	loev	loev		Thin-client/ Remote	Advanced Video Processing,High Definition (HD) Resolution	Yes	No	Yes	No	9	8.6		76					3/15/2012	5/9/2012
L.L.U.	ECHOSIAI	JOEy	Joey		Kemole	Resolution	Tes		165		9	0.0		70					3/13/2012	5/8/2012
						Advanced Video														
Funai						Processing,High Definition (HD) Resolution,Hom														
Corporation,	Funai	NetBOX	TB600FX2		Internet Protocol (IP)	e Network Interface	Yes	No	Yes	Yes	5.64	0.68	3 0.68	18					9/1/2011	6/28/2011
						Advanced Video Processing,High Definition (HD)														
Funai Corporation, Inc.	Magnavox	NetBOX	TB600MG2F/F7		Internet Protocol (IP)	Resolution,Hom e Network	Yes	No	Yes	Yes	5.64	0.68	3 0.68	18					11/1/2011	6/8/2011
						Advanced Video														
					Thin alignt	Processing,High Definition (HD) Resolution,Hom														
Humax	Xfinity	XI3-H	XI3-H		Thin-client/ Remote	e Network Interface	Yes	No	No	No	7.81	7.65	5	82					2/1/2013	11/29/2012

											S	ingle-room Config	juration Test Results		М	ulti-room Configu	ration Test Results	**		
ENERGY STAR Partner	Brand	Model Name	Model Number	Additional Model Information	Product Type	Enhanced Functionalities Present*	ENERGY STAR Certified for Single-room Operation	ENERGY STAR Certified for Multi-room Operation	Auto-Power Down Available	Deep Sleep State Available O	n Mode Power (W)	Sleep Mode Power (W)	Тс	otal Energy nsumption*** (kWh/yr)	On Mode Power (W)	Sleep Mode	Deep Sleep State Power (W)	Total Energy Consumption*** (kWh/yr)	Date Available on Market	Date Qualified
Humax	Xfinity	Xi3v1-H	Xi3v1-H		Thin-client/ Remote	Removable Media Player,Advanced Video Processing,High Definition (HD) Resolution,Hom e Network Interface	Yes	No	No	Νο	8.82	6.66		90					8/1/2013	3/29/2013
					Cable Digital															
Pace plc	Pace	DC60Xu	DC60Xu		Transport Adapter (DTA)	High Definition (HD) Resolution	Yes	No	No	No	6.35	6.35	5	56					4/2/2012	8/28/2012
Pace plc	Pace	DC70Xn	DC70Xn		Cable Digital Transport Adapter (DTA)	Advanced Video Processing,High Definition (HD) Resolution	Yes	No	No	No	6.1	5.2	2						12/1/2012	11/5/2012
					Internet Protocol	Multi-Stream - Terrestrial/ IP,Advanced Video Processing,High Definition (HD) Resolution,Hom e Network														
Pace plc	Pace	IPH8000	IPH8000		(IP)	Advanced Video Processing,High Definition (HD)	Yes	No	No	No	9.3	6.9							8/16/2012	11/5/2012
Pace plc	Pace	IPH8000M	IPH8000M		Internet Protocol (IP)	Resolution,Hom e Network	Yes	No	No	No	8.87	8.34		76					7/16/2012	8/28/2012
Pace plc	Pace	IPH8005	IPH8005		Internet Protocol (IP)	(DVR),High Definition (HD) Resolution,Hom e Network	Yes	No	Yes	No	11.3	8.2		79					1/8/2013	3/18/2013
Pace plc	Pace	IPH8005M	IPH8005M		Internet Protocol (IP)	Advanced Video Processing,Digit al Video Recorder (DVR),High Definition (HD) Resolution,Hom e Network Interface	Yes	No	No	No	10.8	9.3	3	89					3/15/2013	4/3/2013
						DOCSIS,Advanc ed Video Processing,High														
Pace plc	Pace	RNG110	B9793438000		Cable	Definition (HD) Resolution,Cable CARD DOCSIS,Advanc ed Video Processing,High	Yes	No	No	No	12.8	12							12/12/2009	10/30/2012
Pace plc	Pace	RNG110RF	C5453370800		Cable	Definition (HD) Resolution,Cable CARD DOCSIS,Advanc ed Video Processing,Multi -Stream - Cable/	Yes	No	No	No	12.3	11.5	5	105					4/10/2010	8/28/2012
Pace plc	Pace	RNG150N	B9493339200		Cable	Satellite,High Definition (HD) Resolution,Hom e Network Interface	Yes	No	No	No	16.3	15.4		139					10/1/2010	8/28/2012
Pace plc	Pace	RNG150N	C0193340000		Cable	ed Video Processing,Multi -Stream - Cable/ Satellite,High Definition (HD) Resolution,Hom e Network Interface,CableC	Yes	No	No	No	16.4	15.2		139					9/1/2010	8/28/2012

											Si	ingle-room Config	guration Test Results		Mı	ulti-room Configu	ration Test Results*	*		
ENERGY STAR Partner	Brand	Model Name	Model Number	Additional Model Information	Product Type	Enhanced Functionalities Present*	ENERGY STAR Certified for Single-room Operation	ENERGY STAR Certified for Multi-room Operation	Auto-Power Down Available	Deep Sleep State Available	On Mode Power (W)	Sleep Mode Power (W)	Deep Sleep State Power (W)	Fotal Energy onsumption*** (kWh/yr)	On Mode Power (W)	Sleep Mode Power (W)	Deep Sleep State Power (W)	Total Energy Consumption*** (kWh/yr)	Date Available on Market	Date Qualified
Pace plc	Pace	RNG150 P2	RNG150 P2		Cable	DOCSIS,Advanc ed Video Processing,High Definition (HD) Resolution,Cable CARD	Yes	No	Νο	Νο	11.4	10.6		97					4/9/2010	8/28/2012
						DOCSIS,Advanc ed Video Processing,Digit al Video Recorder (DVR),Multi- Stream - Cable/ Satellite,High Definition (HD)														
Pace plc	Pace	RNG200N	B9503339100		Cable	Resolution DOCSIS,Advanc ed Video Processing,Digit al Video Recorder (DVR),Multi- Stream - Cable/ Satellite,High Definition (HD)	Yes	No	No	No	16.8	1	5	141					10/1/2010	10/30/2012
Pace plc	Pace	RNG200N	C0203339900		Cable	Resolution,Cable	Yes	No	No	No	17.7	15.7	7	147					9/1/2010	8/28/2012
Pace plc	Pace	SD Micro DTA	DC50Xu		Cable Digital Transport Adapter (DTA)		Yes	No	No	No	3.3	3.3	3	29					1/12/2011	8/28/2012
Panasonic	Panasonic	DMP-MST60	DMP-MST60		Internet Protocol (IP)	High Definition (HD) Resolution,Hom e Network Interface Multi- Room,DOCSIS, Advanced Video Processing,Digit al Video	Yes	No	Yes	No	5.4	0.3	3	16					12/28/2012	1/9/2013
Samsung Electronics Co., Ltd.	DIRECTV	HR24NC-200	HR24NC-200		Satellite	Recorder (DVR),Multi- Stream - Cable/ Satellite,High Definition (HD)	No	Yes	No	No	22.84	21.45	9	195	23.29	21.29		196	9/1/2011	8/30/2011
Samsung Electronics Co., Ltd.	Samsung	SMT-C5320	SMT-C5320		Cable	DOCSIS,Advanc ed Video Processing,High Definition (HD) Resolution	Yes	No	Yes	No	17.68	10.82	2	117					11/10/2012	11/27/2012
Samsung Electronics Co., Ltd.	Samsung	SMT-C8340	SMT-C8340		Cable	Multi- Room,DOCSIS, Advanced Video Processing,High Definition (HD) Resolution,Cable CARD	No	Yes	Yes	No	26.6	25.58	3	226	26.86	25.96		229	7/11/2011	6/27/2011
Samsung Electronics Co., Ltd.	Samsung	SMT-H3362	SMT-H3362		Cable	Multi- Room,DOCSIS, Advanced Video Processing,High Definition (HD) Resolution,Cable CARD	No	Yes	Yes	No	14.62	14.55	5	127					7/11/2011	6/1/2011
Samsung Electronics						DOCSIS,Advanc ed Video Processing,High Definition (HD) Resolution,Hom e Network Interface,CableC														
Co., Ltd. Samsung	Samsung	SR150BN*	SR150BN*		Cable	ARD DOCSIS,Advanc ed Video Processing,High Definition (HD) Resolution,Hom e Network	Yes	No	Yes	No	14.95	10.2 <sup>,</sup>		101					7/1/2012	2/16/2012
Electronics Co., Ltd.	Samsung	SR150CN*	SR150CN*		Cable	Interface,CableC	Yes	No	Yes	No	14.95	10.21	1	101					5/15/2013	4/29/2013

							ENERGY STAR	ENERGY STAR			S	Single-room Config	uration Test Result	5	Μι	lti-room Configu	ration Test Results*	*		
ENERGY STAR Partner	Brand	Model Name	Model Number	Additional Model Information	Product Type	Enhanced Functionalities Present*	Certified for Single-room Operation	Certified for Multi-room Operation	Auto-Power Down Available	Deep Sleep State Available	On Mode Power (W)	Sleep Mode Power (W)	Deep Sleep State Power (W)	Total Energy Consumption*** (kWh/yr)	On Mode Power (W)	Sleep Mode Power (W)	Deep Sleep State Power (W)	Total Energy Consumption*** (kWh/yr)	Date Available on Market	Date Qualified
Sony Electronics Inc.		NETWORK MEDIA PLAYER	NSZ-GS7		Internet Protocol (IP)	Advanced Video Processing,High Definition (HD) Resolution,Hom e Network Interface	Yes	No	Ves	Vas	7.9	0.23	0.22	21					6/15/2012	4/24/2012
Sony		NETWORK MEDIA			Internet Protocol	Advanced Video Processing,High Definition (HD) Resolution,Hom e Network		No		Yes										
Electronics Inc.		NETWORK MEDIA	NSZ-GX70		(IP)	Advanced Video Processing,High Definition (HD) Resolution,Hom e Network		No		Yes	7.9			21						4/24/2012
Electronics Inc. Sony Electronics Inc.		NETWORK MEDIA	SMP-N200 SMP-NX20		(IP) Internet Protocol (IP)	Advanced Video Processing,High Definition (HD) Resolution,Hom e Network Interface		No	Yes	No	8.01									8/11/2011 8/11/2011
Sony Electronics Inc.			NSZ-GS8		Internet Protocol (IP)	Advanced Video Processing,High Definition (HD) Resolution,Hom e Network		No		Yes	7.9			21						2/21/2013
			VAP430		Internet Protocol (IP)	Removable Media Player,Advanced Video		Νο	No	No	7.16			38						8/28/2012

## **Definitions for Column Headers**

Column Header	Definition
ENERGY STAR Partner	An organization that signed a Partnership Agreement with EPA to manufacture or private label ENERGY STAR qualified products.
Brand	An identifier assigned by the manufacturer or private labeler to a product or family/series of products for sales and marketing purposes.
Model Name	An identifier assigned by the manufacturer or private labeler to a product or family/series of products for sales and marketing purposes.
Model Number	A distinguishing identifier, usually alphanumeric, assigned to a product by the manufacturer or private labeler.
Product Type	The primary means of access to video content for a set- top box. All of the following base types may be configured as a simple set-top box that provides a single primary function, or as part of a complex set-top box that provides a primary function and one or more additional functionalities. a. Cable - receives television signals from a broadband, hybrid fiber/coaxial, or community cable distribution system with conditional access b. Satellite - receives television signals from satellites c. Internet Protocol (IP) - receives television/video signals encapsulated in Internet Protocol (IP) packets d. Cable Digital Transport Adapter (DTA) - a minimally- configured set-top box with a primary function to receive television signals from a broadband, hybrid fiber/ coaxial, or community cable distribution system e. Terrestrial - receives television signals over the air or via community cable distribution system f. Thin-client/Remote - A set-top box that (1) is designed to interface between a multi-room set-top box and a TV (or other output device), (2) has no ability to directly interface with a Service Provider, and (3) relies solely on a multi-room set-top box for content

Column Header	Definition
Enhanced Functionalities Present	Indicates that the product has one or more of the following functionalities in addition to the base functionality. Additional functionalities such as multi- room may be present but not tested by ENERGY STAR. a. Adv. Video Processing - capability to encode, decode, and/or transcode audio/video signals b. CableCARD - capability to decrypt premium audio/ video content and services and provide other network control functions via a plug-in conditional access module. c. Digital Video Recorder (DVR) - capability to store video in a digital format to a rewritable disk drive or other non-volatile storage device integrated into the set- top box d. DOCSIS® - The capability to distribute data and audio/video content over cable television infrastructure. e. High Definition (HD) Resolution - capability to transmit or display video signals with resolution greater than or equal to 720p f. Home Network Interface - capability to interface with external devices over a high bandwidth network (e.g., WiFi, MoCA, HPNA) g. Multi-room - capability to provide independent audio/ video content to multiple devices within a single family dwelling h. Multi-stream - capability to deliver two or more simultaneous audio/video streams to a consumer display, thin-client/remote set-top box, or recording device i. Removable Media Player - capability to decode digitalized audio/video signals on DVD or Blu-ray Disc optical media j. Removable Media Player/Recorder - capability to decode and record digitalized audio/video signals on DVD or Blu-ray Disc optical media
ENERGY STAR Certified for Single- room Operation	This column indicates the product qualifies for ENERGY STAR when providing content to only one TV (or other output device).
ENERGY STAR Certified for Multi- room Operation	Set-top boxes with multi-room capability may be installed to provide independent audio/video content to multiple devices within a single family home. This column indicates that the product qualifies for ENERGY STAR when providing content to more than one TV (or other output device).
Auto-Power Down Available	The column indicates whether or not the product has the capability to switch itself from On mode to Sleep mode after a predetermined period of time.

Column Header	Definition
Deep Sleep State Available	This column indicates whether or not the product incorporates a state within Sleep mode characterized by reduced power consumption.
room configuration and n may be qualified for multi in a single-room configur per Section 3.4.1.i of the	ns are reported test values for the product in single- nulti-room configuration, as applicable. A set-top box i-room operation solely on the basis of tests performed ation (if the tested energy consumption is low enough, ENERGY STAR Eligibility Criteria for Set-top Boxes). Ill be omitted in such cases.
On Mode Power (W)	Measured power according to the ENERGY STAR Set- top Box Test Method with the product activated and providing one or more primary functions, such as delivery of live or recorded audio/video content.
Sleep Mode Power (W)	Measured power according to the ENERGY STAR Set- top Box Test Method where the product is connected to the mains power source, is not providing a primary function, and offers one or more user oriented or protective functions, such as internal sensors, clocks, and facilitation of remote control activation/deactivation.
Deep Sleep State Power (W)	Measured power according to the ENERGY STAR Set- top Box Test Method with the product in Deep Sleep State.
Total Energy Consumption(kWh/ yr)	Calculation of expected energy consumption for a typical user over a one year period, expressed in units of kWh/year. Actual annual energy consumption will vary depending on usage patterns.
Available at Retail	This column indicates with or not the product is available at retail (in-store or online). Set-top boxes are also provided to end users through service providers. A service provider is a business entity that provides audio/ video content to subscribers with whom it has an ongoing contractual relationship. A service provide distributes ENERGY STAR qualified Set-top boxes to end users under a lease or rental agreement.
Date Available on Market	The date that the model is available for purchase.
Date Qualified	The date on which the product was confirmed to meet the ENERGY STAR specification.

## Key Efficiency Criteria

Qualified models meet all ENERGY STAR requirements as listed in the Version 3.0 ENERGY STAR Program Requirements for Set-top Boxes that are effective as of September 1, 2011.

Base Functionality	Energy Allowance (kWh/year)
Cable	60
Satellite	70
Cable DTA	35
IP	50
Terrestrial	22
Thin-Client/Remote [9]	35
Additional Functionalities	Energy Allowance (kWh/year)
Additional Tuners/Multi-Stream – Cable/Satellite[2]	16
Additional Tuners/Multi-Stream – Terrestrial/IP[2]	8
Adv. Video Processing[4]	12
CableCARD[7]	15
Digital Video Recorder (DVR)	45
DOCSIS[8]	20
High Definition[1,5]	25
Home Network Interface [3]	10
Multi-Room[3,6]	40
Removable Media Player	8
Removable Media Player/Recorder	10

To calculate the ENERGY STAR allowance for a given device, take the sum of the base functionality allowance and all applicable additional functionalities allowances (if present). This sum is the calculated annual kWh limit, or TEC value. This sum equals the maximum amount of energy the box can use in a given year as calculated following the ENERGY STAR test procedure.

Annual Energy Allowance (kWh/year) = Base Functionality Allowance + Additional Functionalities Allowance

Notes:

[1] The High Definition allowance is the only additional functionality allowance that may be applied to STBs with CABLE DTA base functionality.

[2] Additional Tuners/Multi-Stream adder applies only once, regardless of the number of tuners/streams.[3] The Multi-Room allowance may not be combined with the Home Network Interface allowance on a single device.

[4] The Adv. Video Processing adder only applies once per box and can not be applied multiple times.

[5] Credit for High Definition applies to all STBs except those with Base Functionality of TERRESTRIAL.

[6] The Multi-room adder applies only once, regardless of the number of rooms served by the device.

[7] The cable card adder can be applied on a per cable card basis in Version 2.0, but only once per STB in Version 3.0.

[8] OEMs must test with DOCSIS enabled if DOCSIS is present. Service providers can test with it and take the allowance only if they use it.

[9] The Advanced Video Processing, Home Network Interface, High Definition, Removable Media Player, and Removable Media Player/Recorder allowances are the only additional functionality allowances that may be applied to STBs with THIN CLIENT / REMOTE base functionality.