



**Set-top Box Qualified Product List**  
**List Posted on May 10, 2010**

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Company Name	Brand Name	Model Name	Model Number	Base Functionality	Tested Power in On Mode	Tested Power in Sleep Mode	Does Product Incorporate Auto Power Down? (Y/N)	Tested Power in Off Mode	Total Energy Consumption (TEC) <sup>1</sup>	Additional Functionalities Present	Date Available on the Market	Available at Retail?	Market in Which Product Is Sold
Cisco	Cisco	Digital Transport Adaptor	DTA30	cable	5.4 W	5.4 W	No	NA	47.3 kWh/yr		August 2009	No	US
Cisco	Cisco	Explorer HD DVR using SARA guide	8640HD	cable	24.7 W	22.7 W	No	NA	209.3 kWh/yr	addtl. tuners, adv. video processing, DVR, HD	August 2009	No	Canada
Cisco	Cisco	Explorer HD DVR using tru2way guide	8640HDC	cable	25.9 W	25.7 W	No	NA	226 kWh/yr	addtl. tuners, adv. video processing, DVR, HD, CableCARD,	August 2009	No	US
Cisco	Cisco	Explorer HD using SARA guide	4640HD	cable	12.8 W	11.7 W	No	NA	108.1 kWh/yr	adv. video processing, HD	August 2009	No	Canada
Cisco	Cisco	Explorer HD using tru2way guide	4640HDC	cable	14.2 W	13.9 W	No	NA	123.3 kWh/yr	adv. video processing, HD, CableCARD, DOCSIS	August 2009	No	US
Cisco	Cisco	High Definition IPTV Media Center with 160GB DVR	IPN430MC	IP	18.8 W	11.6 W	Yes	11.6 W	120.0 kWh/yr	adv. video processing, DVR, HD, home network interface	January 2008	No	US
Cisco	Cisco	High Definition IPTV Media Center with 320GB DVR	ISB7320	IP	18.26 W	14.26 W	Yes	14.26 W	135.1 kWh/yr	adv. video processing, DVR, HD, home network interface	November 2009	No	US
Cisco	Cisco	High Definition IPTV Media Center with 320GB DVR	IPN4320	IP	19 W	12.8 W	Yes	12.8 W	128.0 kWh/yr	adv. video processing, DVR, HD, home network interface	November 2008	No	US
Cisco	Cisco	High Definition IPTV Set Top	ISB7000	IP	13.32 W	12.85 W	Yes	12.85 W	113.8 kWh/yr	adv. video processing, HD, home network interface	November 2009	No	US



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Cisco	Cisco	High Definition IPTV Set-Top	IPN330HD	IP	12.6 W	11.8 W	Yes	11.8 W	105.4 kWh/yr	adv. video processing, HD, home network interface	January 2008	No	US
Cisco	Cisco	RNG HD DVR using SARA guide	RNG200 Black	cable	25.0 W	22.2 W	No	NA	208.8 kWh/yr	addtl. tuners, adv. video processing, DVR, HD, CableCARD	August 2009	No	US
Cisco	Cisco	RNG HD using SARA guide	RNG150	cable	13.0 W	12.6 W	No	NA	112.4 kWh/yr	adv. video processing, HD, CableCARD	April 2009	No	US
DIRECTV	DIRECTV	DIRECTV HD Receiver	H21-200	satellite	14.5 W	13.5 W	No	NA	123.1 kWh/yr	adv. video processing, HD	August 2007	No	US
DIRECTV	DIRECTV	DIRECTV HD Receiver	H23-600	satellite	14.2 W	12.7 W	No	NA	118.8 kWh/yr	adv. video processing, HD	May 2008	No	US
DIRECTV	DIRECTV	DIRECTV Plus DVR	R16-300	satellite	18.8 W	17.6 W	No	NA	161 kWh/yr	addtl. tuners, DVR	December 2007	No	US
DIRECTV	DIRECTV	DIRECTV Plus DVR	R16-500	satellite	19.2 W	18.1 W	No	NA	164 kWh/yr	addtl. tuners, DVR	May 2008	No	US
DIRECTV	DIRECTV	DIRECTV Plus DVR	R22-100	satellite	27.5 W	26.6 W	No	NA	237.7 kWh/yr	addtl. tuners, adv. video processing, DVR, HD	April 2008	No	US
DIRECTV	DIRECTV	DIRECTV Plus DVR	R22-200	satellite	24.8 W	23.9 W	No	NA	214.2 kWh/yr	addtl. tuners, adv. video processing, DVR	July 2008	No	US
DIRECTV	DIRECTV	DIRECTV Plus HD DVR	HR22-100	satellite	28.7 W	27.8 W	No	NA	250.8 kWh/yr	addtl. tuners, adv. video processing, DVR, HD	July 2008	No	US



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DIRECTV	DIRECTV	DIRECTV Plus HD DVR	HR23-700	satellite	22.39 W	21.88 W	No	NA	194.68 kWh/yr	addtl. tuners, adv. video processing, DVR, HD	October 2008	No	US
DIRECTV	DIRECTV	DIRECTV Receiver	D12-100	satellite	8.1 W	6.4 W	No	NA	64.6 kWh/yr	none	November 2007	No	US
DIRECTV	DIRECTV	DIRECTV Receiver	D12-300	satellite	7.1 W	6.4 W	No	NA	59.6 kWh/yr	none	January 2007	No	US
DIRECTV	DIRECTV	DIRECTV Receiver	D12-500	satellite	9 W	7.8 W	No	NA	74.4 kWh/yr	none	April 2008	No	US
DIRECTV	DIRECTV	DIRECTV Receiver	D12-700	satellite	6.8 W	5.7 W	No	NA	55.5 kWh/yr	none	May 2008	No	US
HUAWEI Technologies Co., Ltd	DTA	Digital Transport Adapter	DC732	cable	3.25 W	3.25W	No	NA	28.47 kWh/yr	none	December 2009	No	US, Canada
HUAWEI Technologies Co., Ltd	HUAWEI	Digital Transport Adaptor	DC730	cable	5.5 W	5.5 W	No	NA	48.18 kWh/yr	none	June 2009	No	US, Canada
Motorola	Motorola	Digital Cable Set-top Box	DCX3400	cable	30.58 W	28.68 W	No	NA	259.95 kWh/yr	addtl. tuners, DVR, HD, CableCARD, DOCSIS, home network interface		No	US, Canada, Mexico
Motorola	Motorola	Digital Cable Set-top Box	QIP 7232P2	cable	23.79 W	23.28 W	No	NA	206.35 kWh/yr	addtl. tuners, DVR, HD, CableCARD	February 2010	No	US
Motorola	Motorola	Digital Cable Set-top Box	DCX3400-M	cable	28.37 W	23.35 W	Yes	23.35 W	217.21 kWh/yr	addtl. tuners, DVR, HD, CableCARD, DOCSIS, home network interface	February 2010	No	Canada, Mexico, US



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Motorola	Motorola	Digital Cable Set-top Box	DCX3400	cable	27.86 W	22.95 W	Yes	22.95 W	212.85 kWh/yr	addtl. tuners, DVR, HD, CableCARD, DOCSIS	February 2010	No	Canada, Mexico, US
Motorola	Motorola	Digital Cable Set-top Box	DCX3200-M P1 with OCAP software	cable	18.36 W	14.18 W	Yes	14.18 W	134.93 kWh/yr	HD, CableCARD, DOCSIS, home network interface	February 2010	No	Canada, Mexico, US
Motorola	Motorola	Digital Cable Set-top Box	DCX3200 P1 with OCAP software	cable	17.86 W	13.62 W	Yes	13.62 W	130.14 kWh/yr	HD, CableCARD, DOCSIS	February 2010	No	Canada, Mexico, US
Motorola	Motorola	Digital Set-top Box	QIP7100P2	cable	14.89 W	14.62 W	No	NA	129.45 kWh/yr	HD, CableCard, home network interface	February 2010	No	US
Motorola	Motorola	DTA	100	cable	5.37 W	5.1 W	No	NA	46.06 kWh/yr	none	October 2008	No	US
Motorola	Motorola	VIP2200	IPTV STB	IP	13.14 W	12.97 W	No	NA	114.49 kWh/yr	addtl. tuners, adv. video processing, HD, home network interface	September 2010	No	US
Motorola	Motorola	VIP2232	IPTV STB	IP	17.37 W	14.44 W	No	NA	143.8 kWh/yr	addtl. tuners, adv. video processing, DVR, HD, multi-room	September 2010	No	US
Motorola H&NM, Inc	IPTV STB	VIP1200NA	VIP1200	IP	11.04 W	10.54 W	No	NA	94.88 kWh/yr	adv. video processing, HD, home network interface	September 2007	No	US
Motorola H&NM, Inc	IPTV STB	VIP1200WB	VIP1200WB_NA	IP	10.51 W	10.15 W	No	NA	90.75 kWh/yr	adv. video processing, HD, home network interface	March 2009	No	US



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Motorola H&NM, Inc	IPTV STB	VIP1216	VIP1216NA	IP	16 W	10.78 W	No	NA	121.4 kWh/yr	adv. video processing, DVR, HD, home network interface	September 2007	No	US
Motorola H&NM, Inc	IPTV STB	VIP1225	VIP1225NA	IP	17.3 W	12.19 W	No	NA	133.14 kWh/yr	adv. video processing, DVR, HD, home network interface	December 2008	No	US
Motorola H&NM, Inc	IPTV STB	VIP1225WB	VIP1225WB_NA	IP	17.17 W	12.08 W	No	NA	131.95 kWh/yr	adv. video processing, DVR, HD, home network interface	March 2009	No	US
Pace plc	Comcast	Digital Cable Transport Adaptor	DC50X	cable	3.85 W	3.85 W	No	NA	33.7 kWh/yr	none		No	US
Pace plc	Pace	DC50Xu	C0813339500	cable	3.3 W	3.3 W	No	NA	28.91 kWh/yr	none	February 2010	No	US
Pace plc	Pace	DC50Xu	C0823339600	cable	4.955 W	4.599 W	No	NA	42.11 kWh/yr	none	February 2010	No	US
Pace plc	Pace plc	DC550D	C1583340700	cable	11.17 W	10.95 W	No	NA	97.046 kWh/yr	adv. video processing, HD	February 2010	No	Canada, other
Pace plc	Pace plc	DC700X	B3031015200	cable	15.07 W	13.89 W	No	NA	127.75 kWh/yr	addtl. tuners, adv. video processing, HD, cableCARD	October 2008	No	US
Pace plc	Pace plc	DC701X	B4043432900	cable	12.36 W	12.24 W	No	NA	107.85 kWh/yr	adv. video processing, HD, CableCARD, DOCSIS	May 2009	No	US
Pace plc	Pace plc	DC758D	B7043333200	cable	19.71 W	18.7 W	No	NA	168.99 kWh/yr	addtl. tuners, adv. video processing, HD, DOCSIS	July 2009	No	Canada



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Pace plc	Pace plc	TDC787X	B3903416800	cable	31.04 W	25.15 W	No	NA	250.41 kWh/yr	addtl. tuners, adv. video processing, DVR, HD, DOCSIS	August 2008	No	US
Panasonic	Panasonic		TZ-PCH2180	cable	25.7 W	24.2 W	No	NA	219.7 kWh/yr	addtl. tuners, adv. video processing, DVR, HD, CableCARD, DOCSIS, home network interface	June 2009	No	US
Samsung Electronics	SMT-H3260	SMT-H3260	SMT-H3260	cable	18.43 W	14.5 W	No	NA	147.1 kWh/yr	adv. video processing, HD, CableCARD, DOCSIS	March 2009	No	US
Samsung Electronics	SMT-H3270	SMT-H3270	SMT-H3270	cable	26.33 W	22.7 W	No	NA	218.9 kWh/yr	addtl. tuners, adv. video processing, DVR, HD, CableCARD, DOCSIS	March 2009	No	US

<sup>1</sup> This estimate of total energy consumption over a typical year is an average based on a particular viewing pattern. Your actual energy use may differ, based on how you use your set-top box.

## Key Efficiency Criteria

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<b>Table 1: Base Functionality Annual Energy Allowance</b>		
<b>Base Functionality</b>	<b>Tier 1 Annual Energy Allowance (kWh/year)</b>	<b>Tier 2[1] Annual Energy Allowance (kWh/year)</b>
<b>Effective Dates</b>	<b>1/1/09 - 12/31/10</b>	<b>On and after 1/1/11</b>
Cable	70	50
Satellite	88	56
IP	45	36
Terrestrial	27	22
Thin-Client/Remote	27	22

<b>Table 2: Additional Functionalities Annual Energy Allowance</b>		
<b>Additional Functionalities</b>	<b>Tier 1 Annual Energy Allowance (kWh/year)</b>	<b>Tier 2 Annual Energy Allowance (kWh/year)</b>
<b>Effective Dates</b>	<b>1/1/09 - 12/31/10</b>	<b>On and after 1/1/11</b>
Additional Tuners[2]	53	16
Additional Tuners – Terrestrial /IP[3]	14	8
Adv. Video Processing[4]	18	12
DVR	60	32
High Definition[5]	35	12
Removable Media Player	12	8
Removable Media Player/Recorder	23	10
Multi-Room[6]	44	25
CableCARD[7]	15	TBD
DOCSIS[8]	20	TBD
Home Network Interface	20	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

- [1] Tier 2 limits have been provided throughout this specification as preliminary targets that will be reevaluated by EPA and finalized at least nine months prior to the Tier 2 effective
- [2] Additional Tuners adder applies only once, regardless of the number of tuners.
- [3] Additional Tuners adder applies only once, regardless of the number of tuners.
- [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.
- [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.