

DIRECTV is a signatory to the [Voluntary Agreement for Ongoing Improvement to the Energy Efficiency of Set-Top Boxes](#) (“VA”). As a signatory, DIRECTV committed to procure 90% of its new set-top boxes per the ENERGY STAR® Version 3.0 standard through 2016 and increasingly more stringent standards since (i.e. “Tier 2” effective in 2017, “Tier 3” effective in 2020 and “Tier 4” standard beginning in 2023). We also agreed to provide Typical Energy Consumption (TEC) for set-top box models that are available to customers. The information for those devices is provided below.

## DVR STB Models, Functionality and Energy Consumption

Description	Model	Functionality	Energy Consumption		
			On (W)	Off (W)	TEC (kWh / yr)
<b>DIRECTV</b>	HR24-100	APD, AVP, DVR, HD, MR, MS-C/S	22.50	22.40	196.20
<b>DIRECTV</b>	HR24-200	APD, AVP, DVR, HD, MR, MS-C/S	23.00	21.00	189.30
<b>DIRECTV</b>	HR24-500	APD, AVP, DVR, HD, MR, MS-C/S	24.50	22.60	202.70
<b>DIRECTV</b>	HR34-700	APD, AVP, DVR, HD, MR, MS-C/S	28.50	26.90	239.50
<b>DIRECTV</b>	HR44-200	APD, Adv Video, DVR, HD, HNI, M-HNI, Multi-room, MS, MS-A	19.30	18.10	162.00
<b>DIRECTV</b>	HR44-500	APD, Adv Video, DVR, HD, HNI, M-HNI, Multi-room, MS, MS-A	19.00	17.90	160.00
<b>DIRECTV</b>	HR44-700	APD, Adv Video, DVR, HD, HNI, M-HNI, Multi-room, MS, MS-A	18.50	17.50	156.00
<b>DIRECTV</b>	HR54-200	Adv Video, APD, DVR, HD, HNI, M-HNI, Multi-room, MS, MS-A	12.20	11.10	100.01
<b>DIRECTV</b>	HR54-500	APD, DVR, DVR-A, HNI, M-HNI, Multi-room, MS, MS-A	12.66	12.64	110.80
<b>DIRECTV</b>	HR54-700	Adv Video, APD, DVR, HD, HNI, M-HNI, Multi-room, MS, MS-A	12.10	11.01	99.30
<b>DIRECTV</b>	HS17-100	Adv Video, APD, DVR, HD, M-HNI, Multi-room, MS, MS-A, XCD, MIMO-5(4), UHD-4	20.2	18.92	169.10
<b>DIRECTV</b>	HS17-500	APD, DVR, DVR-A, M-HNI, Multi-room, MS, MS-A, XCD, WiFi (ac) HP, WiFi Addl HP(2), UHD-4	19.48	18.34	163.60
<b>Uverse</b>	VIP 2250	AVP, DVR, HD, MR, MS-T/I	17.00	14.50	143.00
<b>Uverse</b>	VIP 2262	Adv Video-A, DVR, HNI, S-DVR, MS, MS-A	12.06	10.33	99.40
<b>Uverse</b>	VIP 2262v2	Adv Video-A, DVR, HNI, S-DVR, MS, MS-A	12.06	10.33	99.40
<b>Uverse</b>	VIP 2410	AVP, DVR, HD, MR, MS-T/I	17.30	16.40	148.00
<b>Uverse</b>	IPH 8005	AVP, DVR, HD, MR, MS-T/I	11.10	10.00	87.70
<b>Uverse</b>	IPH 8010	AVP, DVR, HD, MR, MS-T/I	11.10	9.90	85.40
<b>Uverse</b>	IPH 8110	AVP, DVR, HD, MR, MS-T/I	10.90	9.70	91.10
<b>Uverse</b>	ISB 7500	AVP, DVR, HD, MR, MS-T/I	18.20	15.50	145.00

## Non-DVR STB Models, Functionality and Energy Consumption

Description	Model	Functionality	Energy Consumption		
			On (W)	Off (W)	TEC (kWh / yr)
<b>DIRECTV</b>	D12-100		7.90	6.20	62.90
<b>DIRECTV</b>	D12-700		6.30	5.30	51.50
<b>DIRECTV</b>	H24-200	APD, AVP, HD, HNI	14.00	11.30	105.90
<b>DIRECTV</b>	H24-700	APD, AVP, HD, HNI	13.70	11.50	106.50
<b>DIRECTV</b>	H25-100	APD, AVP, HD, HNI	10.32	8.42	78.61
<b>DIRECTV</b>	H25-500	APD, AVP, HD, HNI	12.20	11.00	99.30
<b>DIRECTV</b>	H25-700	APD, AVP, HD, HNI	9.90	9.20	82.10
<b>DIRECTV</b>	H44-100	APD (hrs)(4), Adv Video, DVR*, HD, HNI, M-HNI, Multi-room, MS, MS-A	9.79	9.05	81.20
<b>DIRECTV</b>	H44-500	APD, DVR*, DVR-A*, HNI, M- HNI, Multi-room, MS, MS-A	10.37	9.37	85.00
<b>Uverse</b>	VIP 1200	AVD, HD, HNI, MS-T/I	10.90	10.50	94.00
<b>Uverse</b>	VIP 2200	AVP, HD, HNI, MS-T/I	11.30	11.20	98.20
<b>Uverse</b>	VIP 2500	Adv Video-A, HNI, MS, WiFi (ac) LP, WiFi Addl LP(2)	11.73	11.40	102.00
<b>Uverse</b>	ISB 7000	AVP, HD, HNI, MS-T/I	11.80	11.90	103.70
<b>Uverse</b>	ISB 7005	AVP, HD, HNI, MS-T/I	11.60	11.40	101.00
<b>Uverse</b>	ISB 7105	AVP, HD, HNI, MS-T/I	11.70	11.70	103.00
<b>DIRECTV Stream</b>	C71KW-400	HNI, WiFi (ac) LP, WiFi Addl LP(2), HEVP, UHD-4	5.86	4.13	50.0

\* With external DVR attachment, which increases TEC to 104.0 kWh/yr

## Client Set-Top Box Models, Functionality and Energy Consumption

Description	Model	Functionality	Energy Consumption		
			On (W)	Off (W)	TEC (kWh / yr)
<b>DIRECTV</b>	C31-700	APD, AVP, HD, HNI	5.90	4.50	43.20
<b>DIRECTV</b>	C41-100	APD, AVP, HD, HNI	5.60	4.20	39.90
<b>DIRECTV</b>	C41-500	APD, AVP, HD, HNI	5.60	4.10	39.00
<b>DIRECTV</b>	C41-700	APD, AVP, HD, HNI	5.30	3.70	36.20
<b>DIRECTV</b>	C41W-100	APD (hrs)(4), Adv Video, HD, HNI, W-HNI, MIMO-5(4)	7.20	5.57	53.00
<b>DIRECTV</b>	C41W-500	APD (hrs)(4), Adv Video, HD, HNI, W-HNI, MIMO-5(4)	7.17	5.73	53.90
<b>DIRECTV</b>	C51-100	APD, Adv Video, HD, HNI, M-HNI	6.40	3.80	39.40
<b>DIRECTV</b>	C51-500	APD, Adv Video, HD, HNI, M-HNI	5.70	3.70	37.00
<b>DIRECTV</b>	C51-700	APD, Adv Video, HD, HNI, M-HNI	6.10	4.30	41.80
<b>DIRECTV</b>	C61-100	APD (hrs)(4), Adv Video, HD, HNI, M-HNI	5.40	4.25	40.20
<b>DIRECTV</b>	C61-200	APD (hrs)(4), Adv Video, HD, HNI, M-HNI	5.41	4.23	40.10
<b>DIRECTV</b>	C61-500	APD, HNI, M-HNI	5.43	4.22	42.00
<b>DIRECTV</b>	C61-700	APD (hrs)(4), Adv Video, HD, HNI, M-HNI	5.28	4.10	39.00
<b>DIRECTV</b>	C61K-700	Adv Video, APD, HD, HNI, M-HNI, HEVP, UHD-4	9.50	4.10	49.80
<b>DIRECTV</b>	C61W-400	APD, HNI, WiFi (ac) LP, WiFi Addl LP(2)	6.53	5.03	47.90
<b>DIRECTV</b>	C61W-700	APD, HNI, WiFi (ac) LP, WiFi Addl LP(2)	6.56	5.22	49.20

## Set-Top Box Features and Descriptions

Feature	Description
<b>Adv Video</b>	Advanced Video Processing
<b>Adv Video-A</b>	Advanced Video Processing (second active decoder)
<b>AP</b>	WiFi Access Point
<b>APD</b>	Automatic Power Down (max 4 hours)
<b>CC</b>	CableCARD (per CableCARD, max 2)
<b>DVR</b>	Digital Video Recorder
<b>DVR-A</b>	DVR 3.5" hard disk drive (per 1 TB storage, max 2)
<b>HD</b>	High Definition (HD)
<b>HEVP</b>	High Efficiency Video Processing
<b>HNI</b>	Home Network Interface
<b>M-HNI</b>	MoCA HNI
<b>MS</b>	Multi-Stream (1 < received streams ≤ 2)
<b>MIMO-2.4</b>	MIMO WiFi HNI 2.4
<b>MIMO-5</b>	MIMO WiFi HNI 5
<b>MS</b>	Multi-Stream
<b>MS-A</b>	Multi-Stream Additional (first MS-A allowance for 3-8 streams; second allowance for 9-16 streams) (max 2)
<b>Multi-room</b>	Multi-Room
<b>RTG</b>	WiFi Access Point
<b>S-DVR</b>	Shared DVR
<b>TELE</b>	Telephony
<b>UHD-4</b>	Ultra High Definition – 4K
<b>W-HNI</b>	WiFi HNI
<b>Wi-Fi (ac) HP</b>	Wi-Fi, IEEE 802.11ac radio at 5 GHz with a conducted output power greater than or equal to 200 mW per chain (up to 2x2, i.e. 400 mW)
<b>Wi-Fi (ac) LP</b>	Wi-Fi, IEEE 802.11ac radio at 5 GHz with a conducted output power less than 200 mW per chain (up to 2x2, i.e. 400 mW)
<b>Wi-Fi (n) HP</b>	Wi-Fi IEEE 802.11n radio at 2.4 GHz or at 5.0 GHz with a conducted output power greater than or equal to 200 mW per chain (up to 2x2, i.e. 400 mW)
<b>Wi-Fi (n) LP</b>	Wi-Fi IEEE 802.11n radio at 2.4 GHz or at 5.0 GHz with a conducted output power less than 200 mW per chain (up to 2x2, i.e. 400 mW)
<b>Wi-Fi above 2x2 HP</b>	Additional allowance per RF chain above a 2x2 MIMO configuration (e.g., for 3x3 and 4x4) with a conducted output power greater than 200 mW per chain
<b>Wi-Fi above 2x2 LP</b>	Additional allowance per RF chain above a 2x2 MIMO configuration (e.g., for 3x3 and 4x4) with a conducted output power less than 200 mW per chain
<b>XCD</b>	Transcoding
<b>XCD-A</b>	Transcoding Additional (per tested stream transcoded)