

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 effective 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)
DIRECTV	HR24-100	APD, AVP, DVR, HD, MR, MS-C/S	22.50	22.40	196.20
DIRECTV	HR24-200	APD, AVP, DVR, HD, MR, MS-C/S	23.00	21.00	189.30
DIRECTV	HR24-500	APD, AVP, DVR, HD, MR, MS-C/S	24.50	22.60	202.70
DIRECTV	HR34-700	APD, AVP, DVR, HD, MR, MS-C/S	28.50	26.90	239.50
DIRECTV	HR44-200	APD, Adv Video, DVR, HD, HNI, M-HNI, Multi-room, MS, MS-A	19.30	18.10	162.00
DIRECTV	HR44-500	APD, Adv Video, DVR, HD, HNI, M-HNI, Multi-room, MS, MS-A	19.00	17.90	160.00
DIRECTV	HR44-700	APD, Adv Video, DVR, HD, HNI, M-HNI, Multi-room, MS, MS-A	18.50	17.50	156.00
DIRECTV	HR54-200	Adv Video, APD, DVR, HD, HNI, M-HNI, Multi-room, MS, MS-A	12.20	11.10	100.01
DIRECTV	HR54-500	APD, DVR, DVR-A, HNI, M-HNI, Multi-room, MS, MS-A	12.66	12.64	110.80
DIRECTV	HR54-700	Adv Video, APD, DVR, HD, HNI, M-HNI, Multi-room, MS, MS-A	12.10	11.01	99.30
DIRECTV	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
DIRECTV	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
Uverse	VIP 2250	AVP, DVR, HD, MR, MS-T/I	17.00	14.50	143.00
Uverse	VIP 2262	Adv Video-A, DVR, HNI, S-DVR, MS, MS-A	12.06	10.33	99.40
Uverse	VIP 2262v2	Adv Video-A, DVR, HNI, S-DVR, MS, MS-A	12.06	10.33	99.40
Uverse	VIP 2410	AVP, DVR, HD, MR, MS-T/I	17.30	16.40	148.00
Uverse	IPH 8005	AVP, DVR, HD, MR, MS-T/I	11.10	10.00	87.70
Uverse	IPH 8010	AVP, DVR, HD, MR, MS-T/I	11.10	9.90	85.40
Uverse	IPH 8110	AVP, DVR, HD, MR, MS-T/I	10.90	9.70	91.10
Uverse	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)
DIRECTV	D12-100		7.90	6.20	62.90
DIRECTV	D12-700		6.30	5.30	51.50
DIRECTV	H24-200	APD, AVP, HD, HNI	14.00	11.30	105.90
DIRECTV	H24-700	APD, AVP, HD, HNI	13.70	11.50	106.50
DIRECTV	H25-100	APD, AVP, HD, HNI	10.32	8.42	78.61
DIRECTV	H25-500	APD, AVP, HD, HNI	12.20	11.00	99.30
DIRECTV	H25-700	APD, AVP, HD, HNI	9.90	9.20	82.10
DIRECTV	H44-100	APD (hrs)(4), Adv Video, DVR*, HD, HNI, M-HNI, Multi-room, MS, MS-A	9.79	9.05	81.20
DIRECTV	H44-500	APD, DVR*, DVR-A*, HNI, M-HNI, Multi-room, MS, MS-A	10.37	9.37	85.00
Uverse	VIP 1200	AVD, HD, HNI, MS-T/I	10.90	10.50	94.00
Uverse	VIP 2200	AVP, HD, HNI, MS-T/I	11.30	11.20	98.20
Uverse	VIP 2500	Adv Video-A, HNI, MS, WiFi (ac) LP, WiFi Addl LP(2)	11.73	11.40	102.00
Uverse	ISB 7000	AVP, HD, HNI, MS-T/I	11.80	11.90	103.70
Uverse	ISB 7005	AVP, HD, HNI, MS-T/I	11.60	11.40	101.00
Uverse	ISB 7105	AVP, HD, HNI, MS-T/I	11.70	11.70	103.00
DIRECTV Stream	C71KW-400 (Stream)	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)
DIRECTV	C31-700	APD, AVP, HD, HNI	5.90	4.50	43.20
DIRECTV	C41-100	APD, AVP, HD, HNI	5.60	4.20	39.90
DIRECTV	C41-500	APD, AVP, HD, HNI	5.60	4.10	39.00
DIRECTV	C41-700	APD, AVP, HD, HNI	5.30	3.70	36.20
DIRECTV	C41W-100	APD (hrs)(4), Adv Video, HD, HNI, W-HNI, MIMO-5(4)	7.20	5.57	53.00
DIRECTV	C41W-500	APD (hrs)(4), Adv Video, HD, HNI, W-HNI, MIMO-5(4)	7.17	5.73	53.90
DIRECTV	C51-100	APD, Adv Video, HD, HNI, M-HNI	6.40	3.80	39.40
DIRECTV	C51-500	APD, Adv Video, HD, HNI, M-HNI	5.70	3.70	37.00
DIRECTV	C51-700	APD, Adv Video, HD, HNI, M-HNI	6.10	4.30	41.80
DIRECTV	C61-100	APD (hrs)(4), Adv Video, HD, HNI, M-HNI	5.40	4.25	40.20
DIRECTV	C61-200	APD (hrs)(4), Adv Video, HD, HNI, M-HNI	5.41	4.23	40.10
DIRECTV	C61-500	APD, HNI, M-HNI	5.43	4.22	42.00
DIRECTV	C61-700	APD (hrs)(4), Adv Video, HD, HNI, M-HNI	5.28	4.10	39.00
DIRECTV	C61K-700	Adv Video, APD, HD, HNI, M-HNI, HEVP, UHD-4	9.50	4.10	49.80
DIRECTV	C61W-400	APD, HNI, WiFi (ac) LP, WiFi Addl LP(2)	6.53	5.03	47.90
DIRECTV	C61W-700	APD, HNI, WiFi (ac) LP, WiFi Addl LP(2)	6.56	5.22	49.20
DIRECTV	C71KW-400 (GEM)	HNI, WiFi (ac) LP, WiFi Addl LP(2), HEVP, UHD-4	6.69	5.91	58.00

Set-Top Box Features and Descriptions

Feature	Description
Adv Video	Advanced Video Processing
Adv Video-A	Advanced Video Processing (second active decoder)
AP	WiFi Access Point
APD	Automatic Power Down (max 4 hours)
CC	CableCARD (per CableCARD, max 2)
DVR	Digital Video Recorder
DVR-A	DVR 3.5" hard disk drive (per 1 TB storage, max 2)
HD	High Definition (HD)
HEVP	High Efficiency Video Processing
HNI	Home Network Interface
M-HNI	MoCA HNI
MS	Multi-Stream (1 < received streams ≤ 2)
MIMO-2.4	MIMO WiFi HNI 2.4
MIMO-5	MIMO WiFi HNI 5
MS	Multi-Stream
MS-A	Multi-Stream Additional (first MS-A allowance for 3-8 streams; second allowance for 9-16 streams) (max 2)
Multi-room	Multi-Room
RTG	WiFi Access Point
S-DVR	Shared DVR
TELE	Telephony
UHD-4	Ultra High Definition – 4K
W-HNI	WiFi HNI
Wi-Fi (ac) HP	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)
Wi-Fi (ac) LP	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)
Wi-Fi (n) HP	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)
Wi-Fi (n) LP	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)
Wi-Fi above 2x2 HP	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
Wi-Fi above 2x2 LP	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
XCD	Transcoding
XCD-A	Transcoding Additional (per tested stream transcoded)