

## ARRIS SNE Product Energy Efficiency

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This document provides information about the energy efficiency of Small Network Equipment (SNE) models sold by ARRIS through retail channels since January 1, 2015. This information will be updated as ARRIS makes new devices available. Some listed models may no longer be available and/or may not be available in all areas. The power measurements herein represent the SNE devices generally configured and measured in accordance with the test procedures as specified in the Voluntary Agreement. The energy use of an individual SNE device may vary.

| Model Number | Base Type | Additional Features                                                                                          | Idle Power (Watts) |
|--------------|-----------|--------------------------------------------------------------------------------------------------------------|--------------------|
| SB6121       | Basic D3  | GigE LAN                                                                                                     | 6.64               |
| SB6141       | Basic D3  | D3 above 4x4, GigE LAN                                                                                       | 5.45               |
| SB6183       | Basic D3  | D3 above 4x4(3), GigE LAN                                                                                    | 9.40               |
| SB6190       | Basic D3  | D3 above 4x4(7), GigE LAN                                                                                    | 8.60               |
| SB8200       | Basic D3  | D3 above 4x4(7), GigE LAN(2)                                                                                 | 10.75              |
| SBG6400      | IAD D3    | D3 above 4x4, GigE LAN(2), Wi-Fi(n) LP, USB2                                                                 | 8.00               |
| SBG6580      | IAD D3    | D3 above 4x4, GigE LAN(4), Wi-Fi(n) LP                                                                       | 11.44              |
| SBG6580-2    | IAD D3    | D3 above 4x4, GigE LAN(4), Wi-Fi(n) LP                                                                       | 7.80               |
| SBG6700-AC   | IAD D3    | D3 above 4x4, GigE LAN(2), Wi-Fi(n) LP, Wi-Fi(ac) LP, Wi-Fi above 2x2 LP                                     | 10.00              |
| SBG6782-AC   | IAD D3    | D3 above 4x4, GigE LAN(4), Wi-Fi(n) LP, Wi-Fi(ac) LP, Wi-Fi above 2x2 LP, MoCA                               | 13.20              |
| SBG6900-AC   | IAD D3    | D3 above 4x4(3), GigE LAN(4), Wi-Fi(n) LP, Wi-Fi(ac) LP, Wi-Fi above 2x2 LP(2), USB2(2)                      | 14.10              |
| SBG6950AC2   | IAD D3    | D3 above 4x4(3), GigE LAN(4), Wi-Fi(n) LP, Wi-Fi(ac) LP, Wi-Fi above 2x2 LP(2), USB2                         | 11.10              |
| SBG7400AC2   | IAD D3    | D3 above 4x4(5), GigE LAN(4), Wi-Fi(n) LP, Wi-Fi(ac) LP, Wi-Fi above 2x2 LP(3), USB2                         | 13.20              |
| SBG7580-AC   | IAD D3    | D3 above 4x4(7), GigE LAN(4), Wi-Fi(n) LP, Wi-Fi(ac) LP, Wi-Fi above 2x2 LP(2), USB2                         | 14.00              |
| SBR-AC1200P  | Adv. LNE  | FastE LAN(4), GigE LAN, Wi-Fi(n) LP, Wi-Fi(ac) LP, G.hn, USB2, PCIe                                          | 9.50               |
| SBR-AC1750   | Adv. LNE  | GigE LAN(5), Wi-Fi(n) LP, Wi-Fi(ac) LP, Wi-Fi above 2x2 LP(2), USB2                                          | 5.25               |
| SBR-AC1900P  | Adv. LNE  | GigE LAN(5), Wi-Fi(n) LP, Wi-Fi(ac) LP, Wi-Fi above 2x2 LP(2), 802.11n 256 QAM, G.hn, USB2, USB3, PCIe(2)    | 11.90              |
| SBR-AC3200P  | Adv. LNE  | GigE LAN(5), Wi-Fi(n) LP, Wi-Fi(ac) LP(2), Wi-Fi above 2x2 LP(3), 802.11n 256 QAM, G.hn, USB2, USB3, PCIe(4) | 15.00              |

| Model Number | Base Type | Additional Features                                                                                                    | Idle Power (Watts) |
|--------------|-----------|------------------------------------------------------------------------------------------------------------------------|--------------------|
| SBX-1000P    | Basic LNE | GigE LAN, G.hn                                                                                                         | 3.70               |
| SBX-AC1200P  | Adv. LNE  | GigE LAN, Wi-Fi(n) LP, Wi-Fi(ac) LP, G.hn, PCIe                                                                        | 7.40               |
| SVG2482AC    | IAD D3    | D3 above 4x4(5), GigE LAN(4), Wi-Fi(n) LP, Wi-Fi above 2x2 LP, Wi-Fi(ac) HP, Wi-Fi above 2x2 HP, MoCA, FXS(2), USB2(2) | 19.00              |
| TG862G       | IAD D3    | D3 above 4x4, GigE LAN(4), Wi-Fi(n) LP, FXS(2), USB2                                                                   | 8.40               |
| TG862R       | IAD D3    | D3 above 4x4, GigE LAN(4), Wi-Fi(n) LP, FXS(2), USB2                                                                   | 8.40               |
| TM822G       | IAD D3    | D3 above 4x4, GigE LAN, FXS(2)                                                                                         | 5.70               |
| TM822R       | IAD D3    | D3 above 4x4, GigE LAN, FXS(2)                                                                                         | 5.70               |
| WR2100       | Basic LNE | FastE LAN, Wi-Fi(n) LP                                                                                                 | 2.80               |

Note: Idle power may vary when connected to a Service Provider network.

#### Base Type Legend:

| Name      | Description                                                   |
|-----------|---------------------------------------------------------------|
| IAD D3    | Integrated Access Device with DOCSIS 3 WAN, 4x4 configuration |
| IAD GigE  | Integrated Access Device with Gigabit Ethernet WAN            |
| Basic D3  | Broadband Modem with DOCSIS 3 WAN, 4x4 configuration          |
| Basic LNE | Basic Local Network Equipment without IAD functionality       |
| Adv. LNE  | Advanced Local Network Equipment with IAD functionality       |

#### Additional Features Legend:

| Name               | Description                                                                                              |
|--------------------|----------------------------------------------------------------------------------------------------------|
| D3 above 4x4       | DOCSIS 3, additional groups of 4 downstream channels (above 4x4)                                         |
| FastE LAN          | Fast Ethernet LAN port                                                                                   |
| GigE LAN           | Gigabit Ethernet LAN port                                                                                |
| Wi-Fi(n) LP        | Wi-Fi 802.11n 2.4GHz or 5GHz radio, up to 2x2 MIMO, conducted output power less than 200mW per chain     |
| Wi-Fi(ac) LP       | Wi-Fi 802.11ac 5GHz radio, up to 2x2 MIMO, conducted output power less than 200mW per chain              |
| Wi-Fi above 2x2 LP | Additional RF chains above 2x2 MIMO (less than 200mW)                                                    |
| Wi-Fi(n) HP        | Wi-Fi 802.11n 2.4GHz or 5GHz radio, up to 2x2 MIMO, conducted output power of 200mW or greater per chain |
| Wi-Fi(ac) HP       | Wi-Fi 802.11ac 5GHz radio, up to 2x2 MIMO, conducted output power of 200mW or greater per chain          |
| Wi-Fi above 2x2 HP | Additional RF chains above 2x2 MIMO (200mW or greater)                                                   |
| 802.11n 256 QAM    | Wi-Fi 802.11n at 2.4GHz supporting 256-QAM                                                               |
| USB2               | USB 2.0 port (no load connected)                                                                         |
| USB3               | USB 3.0 port (no load connected)                                                                         |
| MoCA               | Media over Coaxial Cable, version 1.1 or 2.0                                                             |

| Name | Description                                         |
|------|-----------------------------------------------------|
| FXS  | Foreign eXchange Subscriber (analog phone port)     |
| PCIe | PCIe Interface (connected internally)               |
| G.hn | Gigabit Home Networking (Power Line Communications) |

Note: A product may have multiple instances of a feature listed in this table. In those cases, the number of allowance adders applicable to the product is shown in parenthesis.

**Product Type Definitions:**

Broadband Modem: A simple network device that enables high speed data service with a WAN (Wide Area Network) interface to a service provider wired or optical network, and typically a single LAN (Local Area Network) interface for the customer premise network. The Broadband Modem category does not include devices with integrated router, or IEEE 802.11 (Wi-Fi) wireless access point functionality.

Integrated Access Device (IAD): A network device that enables high speed data service with a WAN (Wide Area Network) interface to a service provider wired or optical network, and one or more of the following functions on the LAN (Local Area Network) interface: multiport routing, IEEE 802.11 (Wi-Fi) wireless access point functionality, and/or VoIP (Voice over Internet Protocol).

Local Network Equipment (LNE): A network device that does not have a direct interface to a service provider network. This category of products is further divided as follows:

Basic LNE: A simple local network device that does not include additional routing functionality. Examples include wireless repeaters and network extenders.

Advanced LNE: A local network device that includes advanced functions such as multi-point routing, wireless access point, and/or VoIP.

**Reference:**

For further information, the “Voluntary Agreement for Ongoing Improvement to the Energy Efficiency of Small Network Equipment” is available at:

<http://www.energy-efficiency.us/library/pdf/SNE-VoluntaryAgreement.pdf>