



90W UNIVERSAL LAPTOP POWER SUPPLY

- Ultra slim housing (17mm) with power output up to 90W
- Features SCM computer controlling technique to ensure high efficiency charging
- LED digital indicator displays the working voltage
- With 42 replaceable charging tips, 8 included with this package and others are sold separately. This allows you to use the same laptop charging to power almost all laptop models on the market.
- Protects with over voltage, over temperature, over load, over current and short circuit protection.

| Output | Code |
|--|------------|
| DC: 12-24V 6A (90W max) , USB: 5V 2.1A (max) | LS-PAB90SA |



CHARGING TIPS INCLUDED

| | Volts | Current | Size | Brand | Plugs | |
|--|-------|---------|----------------|---|--------|----------|
| | 19V | 4.9A | 4.8x1.7x10.7mm | HP, Compaq, Delta, ASUS, NEC | LS-N04 | Included |
| | 19V | 4.9A | 5.5x2.5x10.7mm | IBM, Dell, Delta, Compaq, HP, ASUS, LS, Toshiba, NEC, Liteon. | LS-N07 | Included |
| | 19V | 3.95A | 5.5x1.7x10.7mm | Toshiba, Delta, Acer | LS-N11 | Included |
| | 19.5V | 4.62A | 7.4x5x12.5mm | Dell | LS-N22 | Included |

| | Volts | Current | Size | Brand | Plugs | |
|--|-------|---------|--------------|-------------|--------|----------|
| | 18.5V | 3.5A | 7.4x5x12.5mm | HP, Compaq | LS-N23 | Included |
| | 20V | 4.5A | 7.9x12x5.5mm | IBM, Lenovo | LS-N24 | Included |
| | 20V | 3.25A | 11x11x4.6mm | Lenovo | LS-N35 | Included |
| | 19.5V | 3.33A | 4.5x3x11mm | HP | LS-N36 | Included |

80W USB-B AND USB-C AND LAPTOP CHARGER

QUALCOMM® QUICK CHARGE™ 3.0 - PLUS LAPTOP CHARGER WITH PLUG KIT

- Supply power for laptops, smart phones and tablet PCs.
- 4x USB-B (QC 3.0), 1x USB-C. 5-20V 3A max.
- Laptop power via 10 assorted DC plugs included
- Adopt Qualcomm Quick Charge™ 3.0 technology for fast and efficient charging.
- Adopt USB PD2.0 technology, offers fast and efficient charging for USB-C devices.
- Ultra slim and curved housing design, compact and portable.
- Universal output voltage from 5V to 20V, automatic switching, plug & play.
- Excellent safety protection includes over current protection, over voltage protection, short circuit protection, over temperature protection.

| Code |
|-----------|
| LS-Q5U-PD |



USB-B

Charging ports for mobile devices DC 3.6-6.5V(3A), 9V(2A), 12V(1.5A), 20V(1A)

USB-C

CHARGING TIPS INCLUDED

| | Volts | Current | Size | Brand | Plugs | |
|--|-------|---------|----------------|---|--------|----------|
| | 19V | 4.9A | 4.8x1.7x10.7mm | HP, Compaq, Delta, ASUS, NEC | LS-N04 | Included |
| | 19V | 4.9A | 5.5x2.5x10.7mm | IBM, Dell, Delta, Compaq, HP, ASUS, LS, Toshiba, NEC, Liteon. | LS-N07 | Included |
| | 19V | 3.95A | 5.5x1.7x10.7mm | Toshiba, Delta, Acer | LS-N11 | Included |
| | 19V | 3.42A | 5.5x2.1x10.7mm | Acer, Liteon, NEC | LS-N18 | Included |
| | 19V | 3.16A | 5.5x3x10.7mm | Samsung | LS-N19 | Included |

| | Volts | Current | Size | Brand | Plugs | |
|--|-------|---------|--------------|-------------|--------|----------|
| | 18.5V | 3.5A | 7.4x5x12.5mm | HP, Compaq | LS-N23 | Included |
| | 20V | 4.5A | 7.9x12x5.5mm | IBM, Lenovo | LS-N24 | Included |
| | 20V | 3.25A | 11x11x4.6mm | Lenovo | LS-N35 | Included |
| | 19.5V | 3.33A | 4.5x3x11mm | HP | LS-N36 | Included |
| | 19.5V | 2.31A | 4.5x3x11mm | Dell | LS-N42 | Included |

87W USB-C LAPTOP & QC 3.0 CHARGER

2x QUALCOMM® QUICK CHARGE™ 3.0 + 2x USB-PD 3.0 PORTS

This 87W USB-C PD 3.0 & USB-A QC3.0 charger allows you to charge all of your devices including notebooks, ultrabooks, tablets, smartphones and more. It features 2x USB Type-C Power Delivery 3.0 charging ports for fast and efficient charging notebooks, tablets and smartphones. Such as the latest Apple Macbooks or Chromebooks, Apple iPhone 11, Google Pixel 4 and more. The USB Quick Charge 3.0 ports can Fast charge Quick Charge compatible devices. Includes 1M USB-C to USB-C charging and 1.2M AC power cord. It features multiple safety protection include over current, over voltage, short circuit and over temperature protection.

- Supply power for laptops, smart phones and tablet PCs.
- 2x USB-A (QC 3.0), 5-20V 3.5A max and 2x USB-C (PD 3.0), 5-20V 4.3A max.
- Adopt Qualcomm Quick Charge™ 3.0 technology for fast and efficient charging.
- Adopt USB PD3.0 technology, offers fast and efficient charging for USB-PD devices.
- Ultra slim and curved housing design, compact and portable.
- Universal output voltage from 5V to 20V, automatic switching, plug & play.
- Excellent safety protection includes over current protection, over voltage protection, short circuit protection, over temperature protection.

Code
LS-PD87-2C2A



Includes 1.2M AC lead and USB-C Male to Male cable.



87W USB-C & QC 3.0 LAPTOP CHARGER WITH USB TO DC CABLE

2x QUALCOMM® QUICK CHARGE™ 3.0 + 2x USB-PD 3.0 PORTS





This 87W USB-C PD 3.0 & USB-A QC3.0 charger allows you to charge all of your devices including notebooks, ultrabooks, tablets, smartphones and more. It features 2x USB Type-C Power Delivery 3.0 charging ports for fast and efficient charging notebooks, tablets and smartphones. Such as the latest Apple Macbooks or Chromebooks, Apple iPhone 11, Google Pixel 4 and more. The USB Quick Charge 3.0 ports can Fast charge your laptops with the included DC cable and connectors at up to 70W. There are 8 interchangeable tips included to suit most of the popular laptops on the market. Optional tips are available for other laptop models. Includes 1M USB-C to USB-C charging and 1.2M AC power cord. It features multiple safety protection include over current, over voltage, short circuit and over temperature protection.





- Supply power for laptops, smart phones and tablet PCs.
- 2x USB-A (QC 3.0), 5-20V 3.5A max and 2x USB-C (PD 3.0), 5-20V 4.3A max.
- Laptop power via 8 assorted DC plugs included
- Adopt Qualcomm Quick Charge™ 3.0 technology for fast and efficient charging.
- Adopt USB PD3.0 technology, offers fast and efficient charging for USB-PD devices.
- Ultra slim and curved housing design, compact and portable.
- Universal output voltage from 5V to 20V, automatic switching, plug & play.
- Excellent safety protection includes over current protection, over voltage protection, short circuit protection, over temperature protection.

Code
LS-PD87-2C2A-KT



Includes 1.2M AC lead and USB-C Male to Male cable.

| | Volts | Current | Size | Brand | Plugs |
|---|-------|---------|----------------|---|-------------------|
|  | 19V | 4.9A | 4.8x1.7x10.7mm | HP Asus NEC | LS-N04WH Included |
|  | 19V | 4.9A | 5.5x2.5x10.7mm | IBM, Dell, HP, ASUS, Toshiba, BenQ | LS-N07WH Included |
|  | 19V | 3.95A | 5.5x1.7x10.7mm | Toshiba Acer Liteon | LS-N11WH Included |
|  | 19.5V | 4.62A | 7.4x5x12.5mm | Dell | LS-N22WH Included |

| | Volts | Current | Size | Brand | Plugs |
|---|-------|---------|--------------|----------------|-------------------|
|  | 18.5V | 4.9A | 7.4x5x12.5mm | HP | LS-N23WH Included |
|  | 20V | 4.5A | 7.9x5.5x12mm | IBM/ Lenovo | LS-N24WH Included |
|  | 20V | 4.5A | 11x4.6x11mm | Lenovo | LS-N35WH Included |
|  | 19.5V | 4.62A | 4.5x3x11mm | HP | LS-N36WH Included |



LS TYPE LAPTOP POWER SUPPLY CHARGING TIPS

CHARGING TIPS NOT INCLUDED

The LS type laptop power supply charging tip is designed to use with universal laptop power supply and USB type-C/laptop chargers. Choose the correct tip to suit your specific laptop.

- LS-PAB90SA
- LS-Q5U-PD
- LS-PD87-2C2A-KT



Choose Fitting Tip Before Power



Each power tip with its own size, output voltage, compatible brand models

- ✓ Correct Tip Size
- ✓ Correct DC Power Tip Output Voltage
- ✓ Correct Laptop Brand / Model

Special Mark helps to plug the tip properly

Tip Number and Voltage is Molded on Each Connector



| Volts | Current | Brand | Suits | Black | White | | |
|-------|---------|------------------------------------|--|--|----------|---|----------|
| 10V | 2.315A | ASUS | Asus: 9.5V 2.315A |  | LS-N01BK |  | LS-N01WH |
| 12V | 3.5A | HP | HP: 12V 2.5A, 12V 3.5A; Asus: 12V 3A |  | LS-N02BK |  | LS-N02WH |
| 20V | 3.25A | Lenovo | Lenovo: 20V 2A; Delta: 20C 1.2A; IBM: 20V 2A; LG: 20V 2A; MSI: 20V 2A; LS: 20V 3.25A |  | LS-N03BK | | |
| 19V | 4.9A | HP Asus NEC | HP/COMPAQ: 18.5V/2.7A, 18.5V/3.5A 18.5V 3.8A, 18.5V/4.9A; ASUS: 19V/2.64A; NEC: 19V 2.64A |  | LS-N04BK |  | LS-N04WH |
| 19V | 1.58A | HP Lenovo | HP: 19V 1.58A; Lenovo 20V 2.25A |  | LS-N05BK |  | LS-N05WH |
| 16V | 4A | Sony Fujitsu | Sony: 16V 3.42A, 16V 3.75A, 16V 4A; Fijitsu: 16V 3.36A, 16V 3.75A |  | LS-N06BK |  | LS-N06WH |
| 19V | 4.9A | IBM, Dell, HP, ASUS, Toshiba, BenQ | IBM 18V 1.9A, 19V 2.4A, 19V 3.16A, 19V 4.2A; Dell 19V 3.16A, 19V 3.42A; HP 18.5V 4.9A, 19V 4.9A; ASUS 19V 4.74A; Toshiba 18V 1.9A, 18V 1.7A, 19V 1.58A, 19V 3.16A, 19V 3.42A, 19V 4.74A; BenQ 19V 2.1A |  | LS-N07BK |  | LS-N07WH |
| 12V | 8A | Acer Benq | Acer/Benq LCD: 12V 1A, 12V 2A, 12V 2.5A, 12V 3A, 12V 3.5A, 12V 4A, 12V 5A, 12V 6A, 12V 7A, 12V 8A |  | LS-N08BK |  | LS-N08WH |
| 19.5V | 4.74A | Sony Fujitsu | Sony: 19.5V 2.7A, 19.5V 3A, 19.5V 4.1A, 19.5V 4.7A; Fujitsu: 19.5V 3.16A, 19.5V 3.69A, 19V 4.22A |  | LS-N09BK |  | LS-N09WH |
| 14V | 4A | Dell Samsung | Dell: 14V 3A; Samsung 14V 3A, 14V 4A |  | LS-N10BK |  | LS-N10WH |
| 19V | 3.95A | Toshiba Acer Liteon | Toshiba 19V 3.95A; Acer 19V 1.58A, 19V 3.16A, 19V 3.42A; Liteon 19V 3.42A |  | LS-N11BK |  | LS-N11WH |
| 12V | 3.5A | Samsung | Samsung: 12V 3.5A; Kodak: 12V 2A |  | LS-N12BK |  | LS-N12WH |
| 15V | 6A | Toshiba | Toshiba: 15V 3A, 15V 4A, 15V 5A, 15V 6A; NEC: 15V 4A, 15V 6A |  | LS-N13BK |  | LS-N13WH |
| 16V | 4.5A | IBM Acer | IBM: 16V 2.2A, 16V 1.88A, 16V 3.36A, 16V 3.5A, 16V 4.5A; DELTA: 15V 1A, 16V 3.5A, 16V 4.5A; Acer: 16V 3.75A |  | LS-N14BK |  | LS-N14WH |
| 22V | 2.04A | Sharp | Sharp: 22V 1.8A, 22V 2.04A |  | LS-N16BK | | |
| 19V | 4.74A | HP | HP: 18.5V 3.5A, 19V 4.74A with bullet shape |  | LS-N17BK | | |

LS TYPE LAPTOP POWER SUPPLY CHARGING TIPS - Continued...

| Volts | Current | Brand | Suits | Black | White |
|-------|---------|------------|---|--|---|
| 19V | 4.74A | Acer | Acer: 19V 3.16A, 19V 3.42A, 19V 4.74A; Liteon: 19V 3.16A, 19V 3.42A; NEC: 19V 3.16A |  | LS-N18BK  LS-N18WH |
| 19V | 4.74A | Samsung | Samsung: 19V 3.16A, 19V 3.75A, 19V 4.22A, 19V 4.74A |  | LS-N19BK  LS-N19WH |
| 19V | 2.1A | Asus | Asus: 19V 2.1A |  | LS-N20BK  LS-N20WH |
| 19.5V | 4.62A | Dell | Dell: 19.5V 3.34, 19.5V 4.62A |  | LS-N22BK  LS-N22WH |
| 18.5V | 4.9A | HP | HP: 18.5V 3.5A, 18.5V 4.9A |  | LS-N23BK  LS-N23WH |
| 18.5V | 4.9A | HP | HP: 18.5V 3.5A, 18.5V 4.9A | |  LS-N23WH |
| 20V | 4.5A | IBM/Lenovo | IBM/Lenovo: 20V3.25A, 20V 4.5A |  | LS-N24BK  LS-N24WH |
| 24V | 2.65A | Apple | Apple: 24V 1.875A, 24V 2A, 24V 2.65A |  | LS-N26BK |
| 20V | 4.5A | Dell | Dell: 20V 3.5A, 20V 4.5A |  | LS-N27BK  LS-N27WH |
| 14V | 3.5A | Samsung | Samsung: 14V 3A, 14V 3.5A |  | LS-N30BK |
| 19.5V | 4.74A | HP | HP Ultrabooks |  | LS-N32BK  LS-N32WH |
| 19V | 4.74A | Samsung | Samsung Ultrabooks |  | LS-N33BK  LS-N33WH |
| 19V | 4.74A | Fujitsu | Fujitsu tablet PCs |  | LS-N34BK  LS-N34WH |
| 20V | 4.5A | Lenovo | Lenovo: 20V 2.25A, 20V 3.25A, 20V 4.5A |  | LS-N35BK  LS-N35WH |
| 19.5V | 4.62A | HP | HP: 19.5V 2.31A, 19.5V 3.33A, 19.5V 4.62A |  | LS-N36BK  LS-N36WH |
| 19V | 3.42A | Asus | Asus: 19V 2.37A, 19V 3.42A |  | LS-N40BK  LS-N40WH |
| 12V | 2.58A | Microsoft | Microsoft Surface Pro 4: 12V 2.58A |  | LS-N41BK |
| 19.5V | 3.33A | Dell | Dell: 19.5V 2.31A, 19.5V 3.33A |  | LS-N42BK |
| 15V | 2.58A | Microsoft | Microsoft: 15V 2.58A |  | LS-N46BK |



BC10 INTELLIGENT LAPTOP POWER SUPPLY 90W

ULTRA SLIM POWER SOLUTION

- Low profile version with inline LCD display of voltage output. Voltage selected depends on plug used. Includes USB power socket.
- Regulated Laptop mains supply.
- **KIT WITH TEN BC10 PLUGS**
- Includes Plugs A-H, J, K
- Suits most popular laptops.
- More available. See below...
- 30x60x135mm

**BC10
PLUGS**

BC10 Plug ID is listed below (Right Angle). Check to see if your Laptop is accommodated. Additional BC10 plugs are also listed.

Power Code
90W PAB90AL



Laptop

Digital Camera

Digital Camcorder

iPhone™/PDA

Mobile

MP3/MP4

Monitor LCD



BC10 PLUGS - ADDITIONAL AVAILABLE

Choose the correct plug to suit your specific brand of laptop. Most popular types are already supplied with the PAB90AL kit. The type of plug determines the output voltage as per the laptop it is designed to suit. Specifications of each plug are listed below:

| Volts | Current | Plug | Brand | Code |
|----------|---------|--------------------|--------------------------|--------|
| 19V, 20V | 4.74A | 5.5 / 1.7mm | Toshiba | BC10-I |
| 19.5V | 4.62A | 5.5/1.7mm | Toshiba Acer, Delta | BC10-J |
| 20V | 4.50A | 7.3mm ² | *Dell [Square 3-Pin] | BC10-K |
| 22V | 2.04A | 3.5/1.35mm | Sharp | BC10-L |
| 20V | 4.50A | 7.9/ 5.5mm | IBM/Lenovo | BC10-M |
| 12V | 5.00A | 5.5 /2.5mm | LCD | BC10-R |
| 19V | 4.47A | 4.8 /1.7mm | HP/Compaq [*Bullet Head] | BC10-T |
| 9.5V | 4.00A | 5.5/ 1.7mm | ASUS | BC10-U |

Ten other plugs, the more popular types, already supplied.
Right angle versions available below.



BC10 PLUGS - RIGHT ANGLE

Right angle plugs to suit PAB90AL. Please choose the correct plug to suit your specific brand of laptop.

*Are supplied in the PAB90AL kits.

NOTE: * A to H, & K types are already supplied with the chargers. The entire range of plugs are now all available separately in right-angle. These plugs will all suit PAB90AL power supplies. Select the specific plug to suit your specific laptop, then plug and go!

| Volts | Current | Plug | Brand | Code |
|------------|--------------|--------------------|--|----------|
| 18.5V, 19V | 4.90A, 4.75A | EIAJ-03 | *HP/Compaq, Delta Asus NEC | BC10-RA |
| 15V | 6.00A | 6.3/3.0mm | *Toshiba NEC | BC10-RB |
| 19V | 4.75A | 5.5/2.1mm | *Acer Liteon NEC | BC10-RC |
| 19V | 4.75A | 5.5/2.5mm | *IBM Dell Delta HP/Compaq, Asus Liteon NEC Gateway | BC10-RD |
| 16V | 5.00A | 5.5/2.5mm | *IBM | BC10-RE |
| 19V | 4.75A | 5.5/3.0mm | *Samsung | BC10-RF |
| 16V | 5.00A | 6.0/4.3mm | *Sony Fujitsu | BC10-RG |
| 19V, 19.5V | 4.75A, 4.50A | 6.0/4.3mm | *Fujitsu, Sony | BC10-RH |
| 20V | 4.50A | 7.3mm ² | *Dell [Square 3-Pin] | BC10-RK |
| 19V, 20V | 4.75A, 3.50A | 5.5/1.7mm | Toshiba Acer, Delta | BC10-RI |
| 22V | 2.04A | 3.5/1.35mm | Sharp | BC10-RL |
| 24V | 2.70A | 7.7/2.5mm | Apple [LS-CR90AA Only] | BC10-RN |
| 24V | 2.70A | 9.5/3.5mm | Apple [LS-CR90AA Only] | BC10-RO |
| 18.5V | 4.90A | 7.4/5.0mm | HP/Compaq | BC10-RQ |
| 12V | 5.00A | 5.5/2.5mm | General Purpose 12V | BC10-RR |
| 14V | 5.00A | 5.5/2.5mm | Samsung | BC10-RS |
| 19V | 4.74A | *4.8/1.7mm | HP/Compaq [*Bullet Head] | BC10-RT |
| 9.5V | 5.00A | EIAJ-03 | Asus EEE PC | BC10-RU |
| 12V | 3.00A | 5.5/1.7mm | Asus | BC10-RV |
| 19.5V | 3.34A, 4.62A | 7.4/5mm | Dell | BC10-N22 |
| 18.5V | 3.5A, 4.9A | 7.4/5mm | HP | BC10-N23 |
| 20V | 3.25, 4.5A | 7.9/5.5mm | IBM/Lenovo | BC10-N24 |
| 19V | 2.1A | 3/1mm | Samsung | BC10-N33 |
| 19.5V | 2.31A, 3.34A | 4.5/3mm | Dell | BC10-N42 |

**BC10
PLUGS**

