# Seasonic Prime TX power supply unit



Artikel Herstellernummer EAN Seasonic 124547 PRIME-TX-650 4711173874140

Pressing on with its One Seasonic Initiative, the PRIME TX, PRIME PX and PRIME GX series became the successors to the Seasonic PRIME and PRIME Ultra series.

The PRIME Series has always demonstrated outstanding performance and have become the epitome of technological excellence and quality through the years. This third generation of PRIME Series rolled out not only with a uniformed naming scheme but also with updated general design and connection cables. As each new model in these PRIME series have their distinctive set of features and specifications, prospective customers will find a streamlined buying guidance through understanding the One Seasonic process.

#### **80 PLUS® TITANIUM**

The PRIME Titanium Series achieves the highest level of 80 PLUS® Titanium certification on the market with its 94 % efficiency at 50 % system load.

#### MICRO TOLERANCE LOAD REGULATION

Seasonic's latest design keeps the output voltage within a very tight range, achieving under 0.5 % load regulation. This impressive electrical performance and stability makes this power supply an ideal choice for high-performance systems.

#### PREMIUM HYBRID FAN CONTROL

Seasonic's vast experience in designing the most silent and efficient power supplies on the market was translated into the development of Hybrid Mode; a state-of-the-art fan control that enables users to keep the overall fan noise at the lowest possible level.

#### FLUID DYNAMIC FAN BEARING

High performance Fluid Dynamic Bearing (FDB) fans are designed to take advantage of the impact absorbance effects of oil. They are extremely reliable and generate considerably less operating noise and heat than ball bearing fans. The lubrication of the bearing surface reduces friction and vibration and therefore lowers overall power consumption. Due to the effortless, quieter rotations and its robust construction, this reliable fan technology also greatly increases the lifespan of the fan.

#### HOW IT WORKS

When the fan shaft rotates, high pressure oil drifts along the grooves of the bearing sleeve to generate a thin layer of lubrication between the bearing faces. As the speed increases, so does dynamic oil pressure and the shaft is lifted from the bearing to create smooth, effortless rotations. The herringbone shape of the groves helps to efficiently channel the lubricant and avert leakage.

#### CABLE-FREE CONNECTION DESIGN

Seasonic's engineers have implemented a new design feature, where instead of cables; the back panel and the PCB (Printed Circuit Board) are connected by a copper plate. This breakthrough solution not only lowers the chance of production errors during manual insertion but it also improves output power quality.

# Zusammenfassung

Pressing on with its One Seasonic Initiative, the PRIME TX, PRIME PX and PRIME GX series became the successors to the Seasonic PRIME and PRIME Ultra series.

The PRIME Series has always demonstrated outstanding performance and have become the epitome of technological excellence and quality through the years. This third generation of PRIME Series rolled out not only with a uniformed naming scheme but also with updated general design and connection cables. As each new model in these PRIME series have their distinctive set of features and specifications, prospective customers will find a streamlined buying guidance through understanding the One Seasonic process.

#### **80 PLUS® TITANIUM**

The PRIME Titanium Series achieves the highest level of 80 PLUS® Titanium certification on the market with its 94 % efficiency at 50 % system load.

#### MICRO TOLERANCE LOAD REGULATION

Seasonic's latest design keeps the output voltage within a very tight range, achieving under 0.5 % load regulation. This impressive electrical performance and stability makes this power supply an ideal choice for high-performance systems.

#### PREMIUM HYBRID FAN CONTROL

Seasonic's vast experience in designing the most silent and efficient power supplies on the market was translated into the development of Hybrid Mode; a state-of-the-art fan control that enables users to keep the overall fan noise at the lowest possible level.

#### FLUID DYNAMIC FAN BEARING

High performance Fluid Dynamic Bearing (FDB) fans are designed to take advantage of the impact absorbance effects of oil. They are extremely reliable and generate considerably less operating noise and heat than ball bearing fans. The lubrication of the bearing surface reduces friction and vibration and therefore lowers overall power consumption. Due to the effortless, quieter rotations and its robust construction, this reliable fan technology also greatly increases the lifespan of the fan.

#### HOW IT WORKS

When the fan shaft rotates, high pressure oil drifts along the grooves of the bearing sleeve to generate a thin layer of lubrication between the bearing faces. As the speed increases, so does dynamic oil pressure and the shaft is lifted from the bearing to create smooth, effortless rotations. The herringbone shape of the groves helps to efficiently channel the lubricant and avert leakage.

#### **CABLE-FREE CONNECTION DESIGN**

Seasonic's engineers have implemented a new design feature, where instead of cables; the back panel and the PCB (Printed Circuit Board) are connected by a copper plate. This breakthrough solution not only lowers the chance of production errors during manual insertion but it also improves output power quality.

Seasonic Prime TX, 650 W, 100 - 240 V, 50 - 60 Hz, 9.5 - 4.5 A, 100 W, 648 W

Seasonic Prime TX. Total power: 650 W, AC input voltage: 100 - 240 V, AC input frequency: 50 - 60 Hz. Motherboard power connector: 20+4 pin ATX, Motherboard power cable length: 61 cm, SATA power cable length: 450,470,570,700,760,810,860 mm. Purpose: PC, Power supply unit (PSU) form factor: ATX, 80 PLUS certification: 80 PLUS Titanium. Product colour: Black, Fan diameter: 13.5 cm, Number of fans: 1 fan(s). Cables included: AC

# Merkmale

		Weight & dimensio	Weight & dimensions	
Logistics data		Width	150 mm	
Harmonized System (HS)	84733020	Depth	170 mm	
code	04733020	Height	86 mm	
code				
Operational conditions		Design		
•		Product colour	Black	
Operating temperature (T-	T) 0-50 °C	Fan diameter	13.5 cm	
		Number of fans	1 fan(s)	
		Fan location	Тор	
Packaging content		On/off switch	Y	
Cables included	AC			
		Performance		

# **Technical details**

Sustainability certificates RoHS, ENERGY STAR

# Packaging data

Manual	Y
Package type	Box

80 PLUS certification 80 PLUS Titanium Purpose PC Power supply unit (PSU) form ATX factor Bearing technology FDB Mean time between failures 150000 h (MTBF) cTUVus, TUV, CB, CCC, BSMI, Safety EAC, CE Certification WEEE, ErP Lot 6, REACH

### Power

Total power	650 W
AC input voltage	100 - 240 V
AC input frequency	50 - 60 Hz
Input current	9.5 - 4.5 A
Combined power (+3.3V)	100 W
Combined power (+12V)	648 W
Combined power (+5V)	100 W
Combined power (-12V)	3.6 W
Combined power (+5Vsb)	15 W
Max output current (+3.3V)	20 A
Max output current (+12V)	54 A
Max output current (+5V)	20 A
Max output current (-12V)	0.3 A
Max output current (+5Vsb)	3 A
Power protection features	Over current, Over power, Over voltage, Overheating, Short circuit, Under voltage

# Ports & interfaces

Motherboard power connector	20+4 pin ATX
Motherboard power cable length	61 cm
Number of SATA power connectors	10
SATA power cable length	450,470,570,700,760,810,860 mm
Peripheral (Molex) power connectors (4-pin)	5
Peripheral (Molex) power cable length	470,690 mm
PCI Express power connectors (6+2 pin)	4
PCI Express power cable length	75 cm
CPU power connector (4+4 pin)	Y
CPU power cable length	65 cm
ATX power connector (20+4 pin)	Y
Floppy drive power connector	1
Floppy disk drive connector	Y
Floppy disk drive cable length	10.1 cm
PCI Express connector	Y
Cabling type	Modular

Preisänderungen und Irrtümer vorbehalten. Alle Produkte solange der Vorrat reicht.