

GENESYS™ Series

Programmable DC Power Supplies

G1.7 - 5kW in 1U 0-100V, 0-500A

PARALLEL KIT INSTRUCTION MANUAL

The manual covers kit options:

G/P-4U-10-40V

G/P-4U-60-100V

G/P-4U-150-600V



1.1 General

Parallel kit is supplied separately from the power supply packing according to order.

The usage of parallel kit is according to customer's needs.

1.2 Advanced Parallel

For parallel connection, refer to advanced parallel chapter in the **GENESYS™** series User Manual.

1.3 Product Safety Instructions

Safety approvals are valid for **GENESYS™** single unit only. These are not valid for parallel kit assembly.

When using a paralleling kit with a protective bracket, it must be correctly assembled, as described further in this document.

1.4 Assembly Instructions

The supplied kit is used for standard and blank panel options. Follow the instructions carefully according to power supply model.

1.4.1 **G/P-4U-10-40V - Assembly Instructions for four 10V-40V units in Parallel**

1.4.1.1 Components List

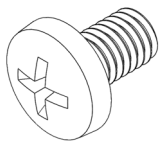
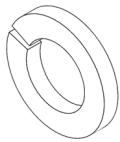
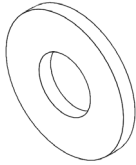

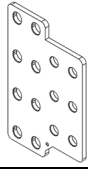
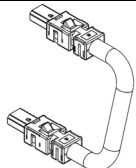
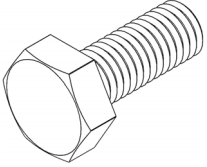
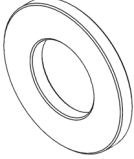
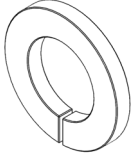
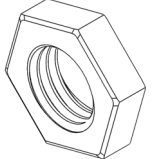
Image	Component	Quantity
	10-32 x 5/16 Pan Head Screw, Stainless Steel	16
	Helical Spring-Lock Washer, No. 10, Stainless Steel	16
	Plain Washer, No. 10, Stainless Steel	16
	Connection Plate 4U	2
	Output Bus Bar Plate	2
	Paralleling Cable	3

Image	Component	Quantity
	M10 x 25 Hexagon Bolt, Stainless Steel	12
	Plain Washer, M10, Stainless Steel	24
	Helical Spring-Lock Washer, M10, Stainless Steel	12
	Hexagon Nut, M10, Stainless Steel	12

1.4.1.2 Installation Steps

1. Attach connection plates, one on each side of the power supplies, using 16 pan head screws, 16 helical spring-lock washers and 16 plain washers as illustrated in Figure 1.

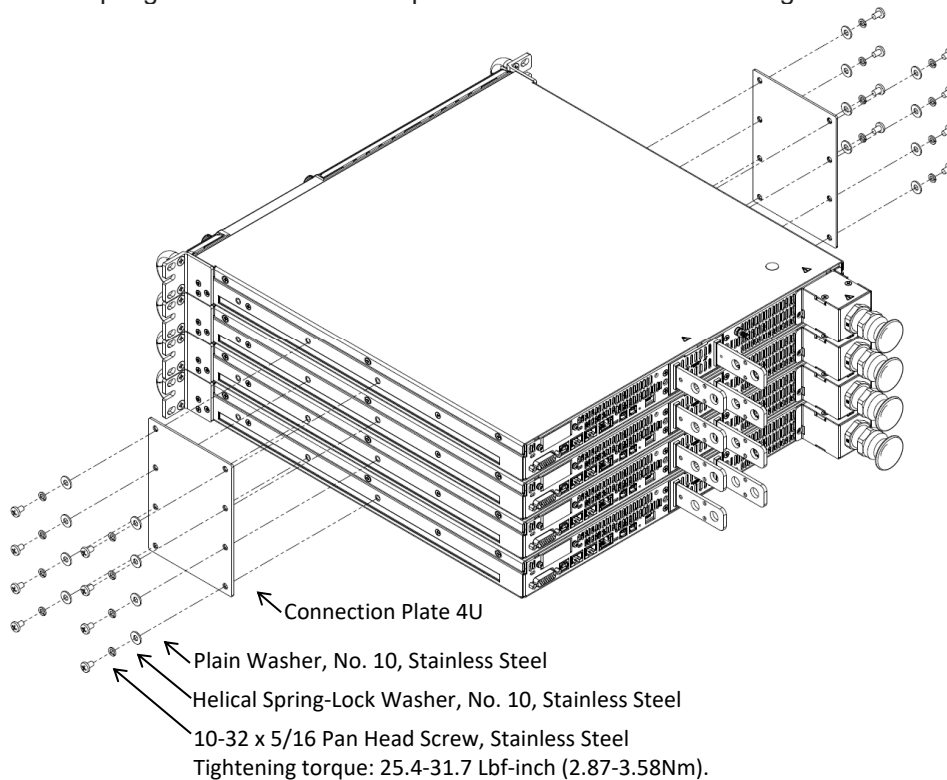


Figure 1: Four 10V-40V Units Connection Plates 4U Assembly

2. Attach output bus bars plates, one on each four terminals, using 16 hexagon bolts, 32 plain washers, 16 helical spring-lock washers and 16 hexagon nuts as illustrated in Figure 2.

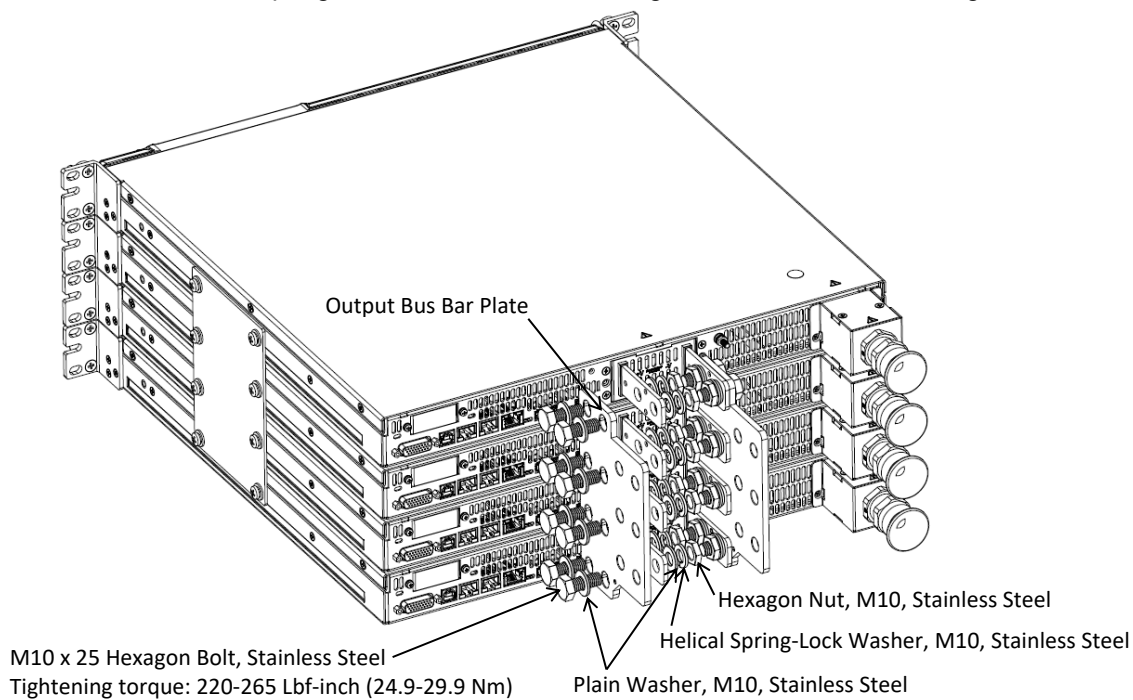


Figure 2: Four 10V-40V Units Output Bus Bars Plates Assembly

3. Connect three paralleling cables from top unit M connector to bottom unit S connector as illustrated in Figure 3.

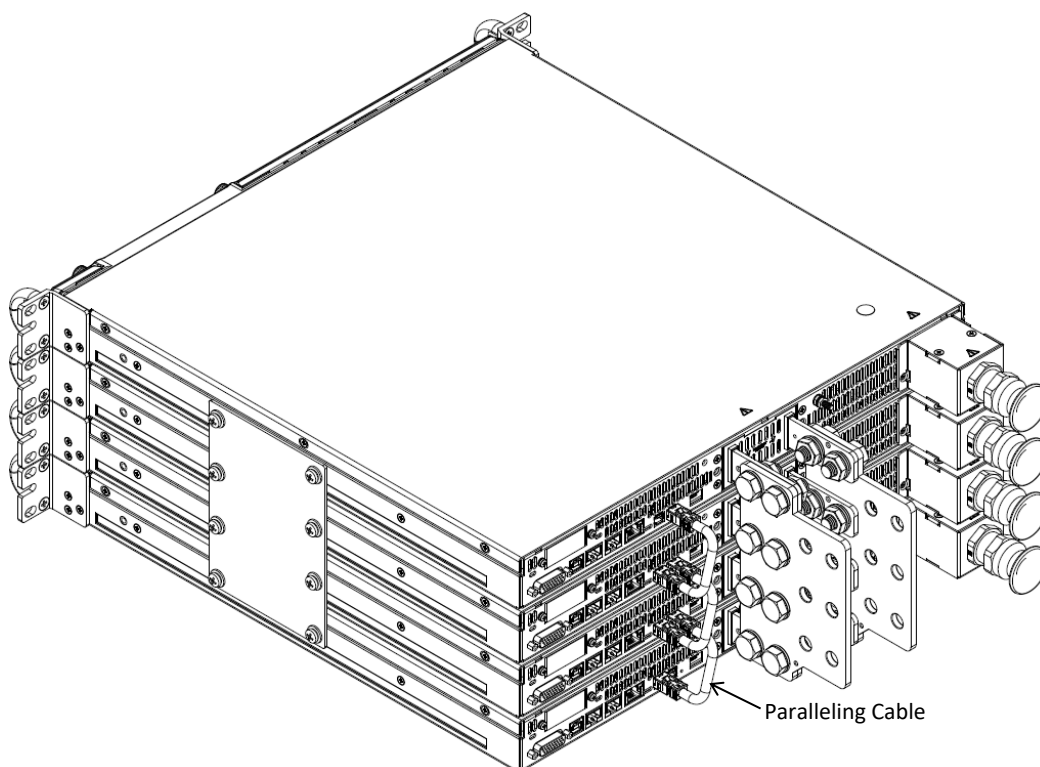
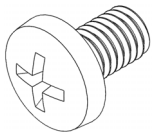

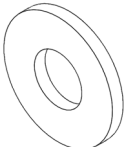
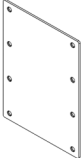
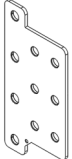
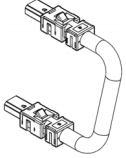
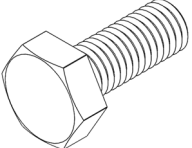
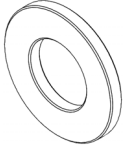
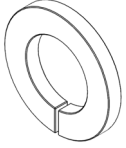
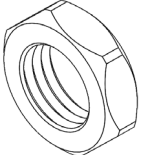


Figure 3: Four 10V-40V Units Paralleling Cable Connection

1.4.2 G/P-4U-60-100V - Assembly Instructions for four 60V-100V units in Parallel

1.4.2.1 Components List

Image	Component	Quantity
	10-32 x 5/16 Pan Head Screw, Stainless Steel	16
	Helical Spring-Lock Washer, No. 10, Stainless Steel	16
	Plain Washer, No. 10, Stainless Steel	16
	Connection Plate 4U	2
	Output Bus Bar Plate	2
	Paralleling Cable	3
	M8 x 25 Hexagon Bolt, Stainless Steel	12
	Plain Washer, M8, Stainless Steel	24
	Helical Spring-Lock Washer, M8, Stainless Steel	12
	Hexagon Nut, M8, Stainless Steel	12

1.4.2.2 Installation Steps

1. Attach connection plates, one on each side of the power supplies, using 16 pan head screws, 16 helical spring-lock washers and 16 plain washers as illustrated in Figure 4.

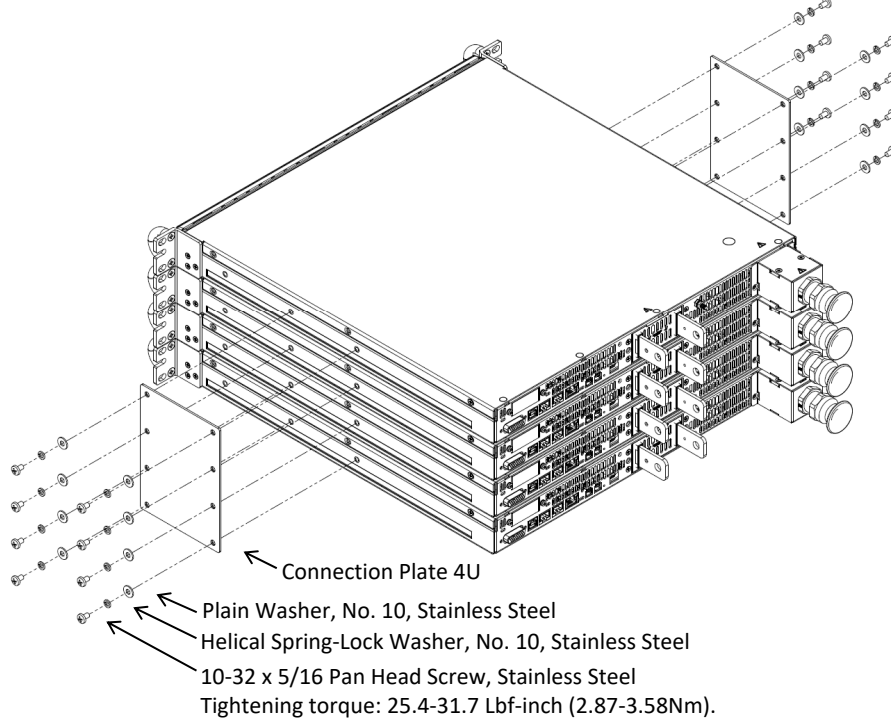


Figure 4: Four 60V-100V Units Connection Plates 4U Assembly

2. Attach output bus bars plates, one on each four terminals, using eight hexagon bolts, 16 plain washers, eight helical spring-lock washers and eight hexagon nuts as illustrated in Figure 5.

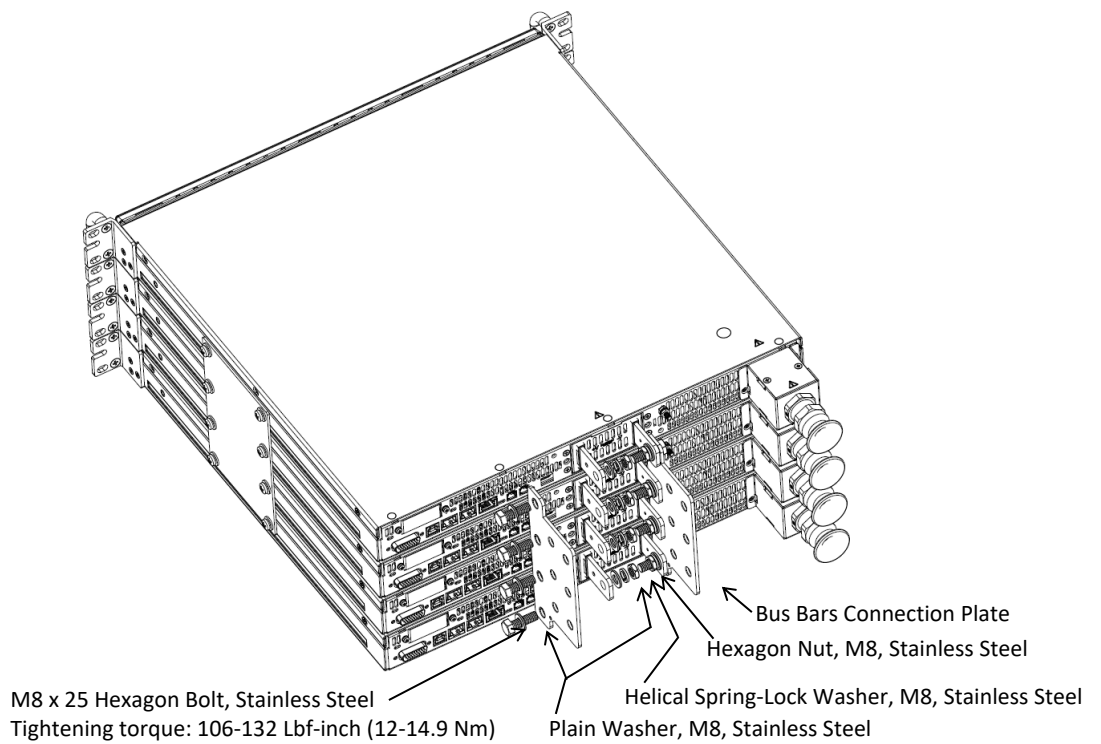


Figure 5: Four 60V-100V Units Output Bus Bars Plates Assembly

3. Connect three paralleling cables from top unit M connector to bottom unit S connector as illustrated in Figure 6.

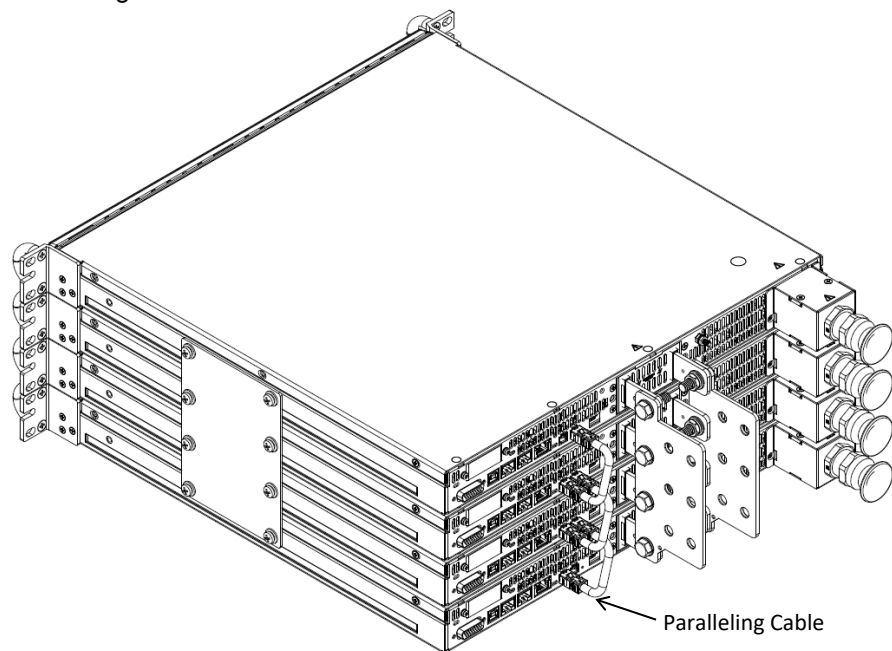
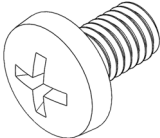
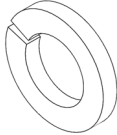
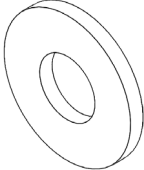

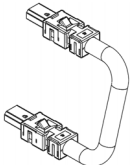


Figure 6: Four 60V-100V Units Paralleling Cable Connection

1.4.3 G/P-4U-150-600V - Assembly Instructions for four 150V-600V units in Parallel

1.4.3.1 Components List

Image	Component	Quantity
	10-32 x 5/16 Pan Head Screw, Stainless Steel	16
	Helical Spring-Lock Washer, No. 10, Stainless Steel	16
	Plain Washer, No. 10, Stainless Steel	16
	Connection Plate 4U	2
	Paralleling Cable	3

1.4.3.2 Installation Steps

1. Attach connection plates, one on each side of the power supplies, using 16 pan head screws, 16 helical spring-lock washers and 16 plain washers as illustrated in Figure 7.

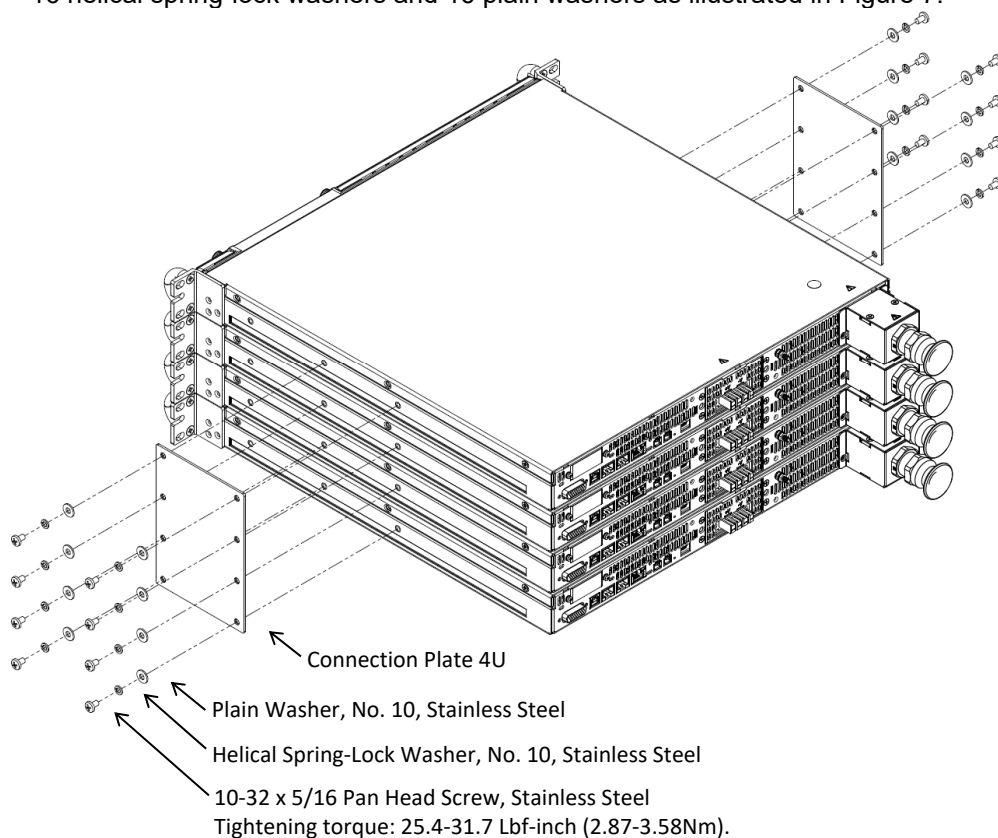


Figure 7: Four 150V-600V Units Connection Plates 4U Assembly

2. Connect three paralleling cables from top unit M connector to bottom unit S connector as illustrated in Figure 8.

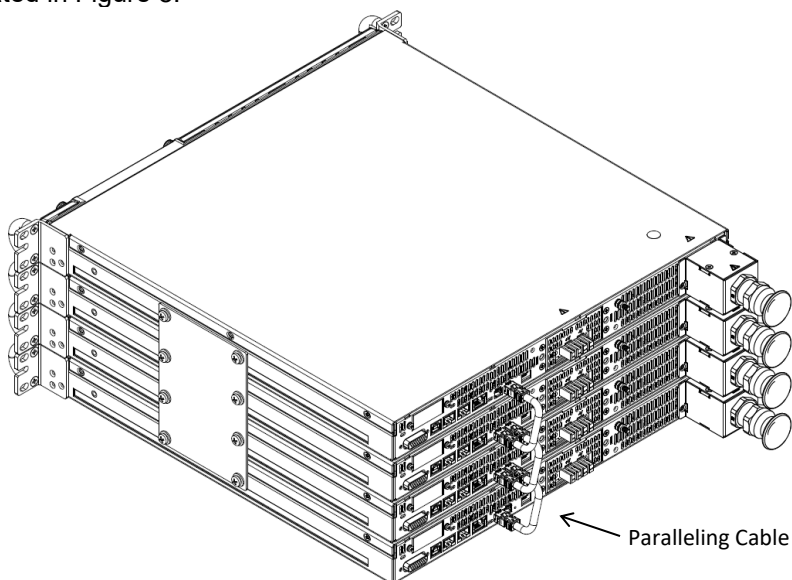


Figure 8: Four 150V-600V Units Paralleling Cable Connection