

# **GENESYS™ Series**

## **Programmable DC Power Supplies**

**G1.7 ÷ 5kW in 1U 0-600V / 0-500A**

The manual covers kit options:

**G/P-4U-10-40V**

**G/P-4U-60-100V**

**G/P-4U-150-600V**

## **PARALLEL KIT INSTRUCTION MANUAL**

IA876-04-03A



Z0022572

## 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

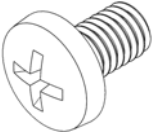




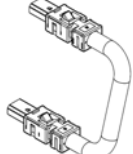
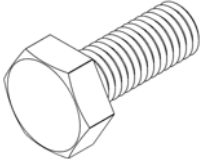


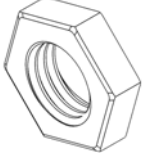
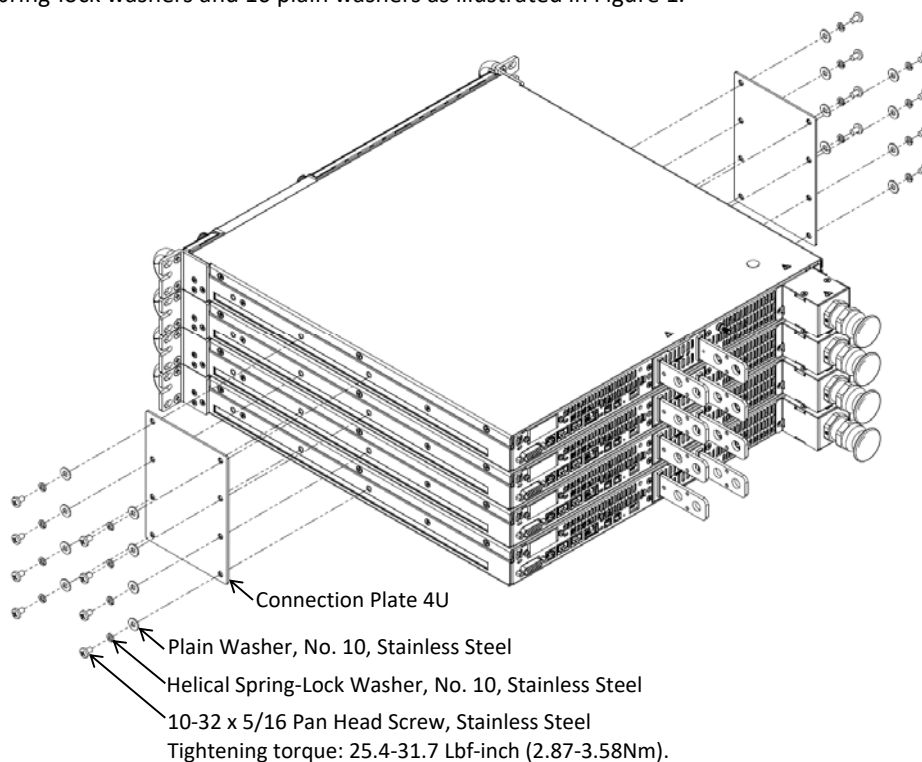
Image	Component	Quantity
	10-32 x 5/16 Pan Head Screw, Stainless Steel	16
	Helical Spring-Lock Washer, No. 10, Stainless Steel	16
	Plain Washer, No. 10, Stainless Steel	16
	Connection Plate 4U	2
	Output Bus Bar Plate	2
	Paralleling Cable	3

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

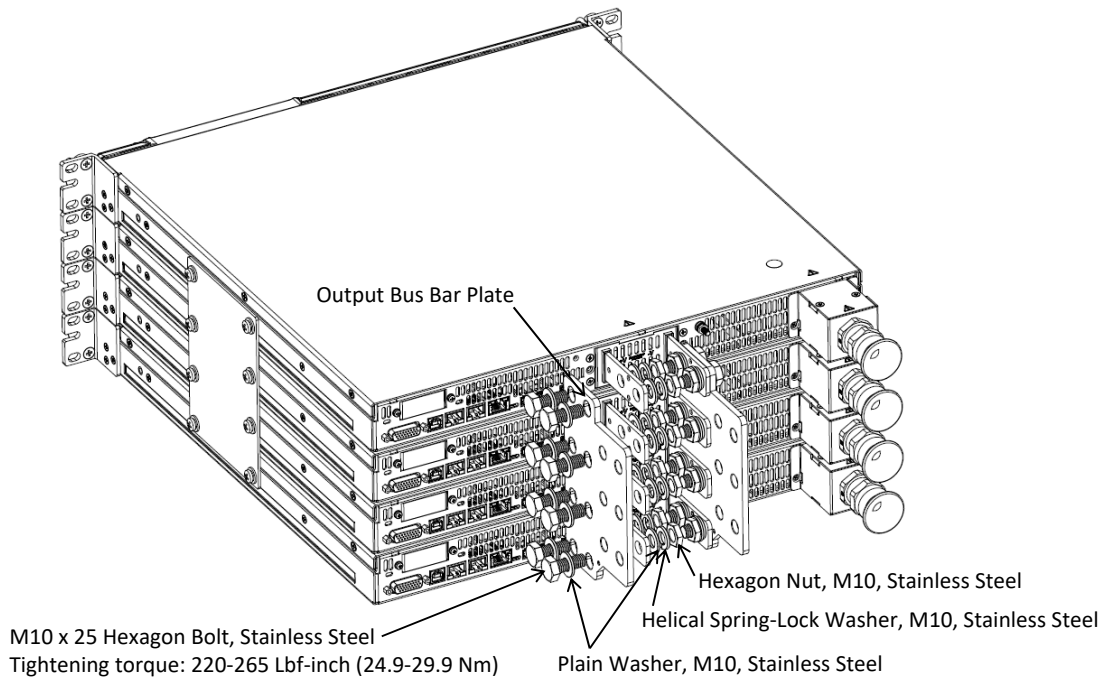
**1.4.1.2 Installation Steps**

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.



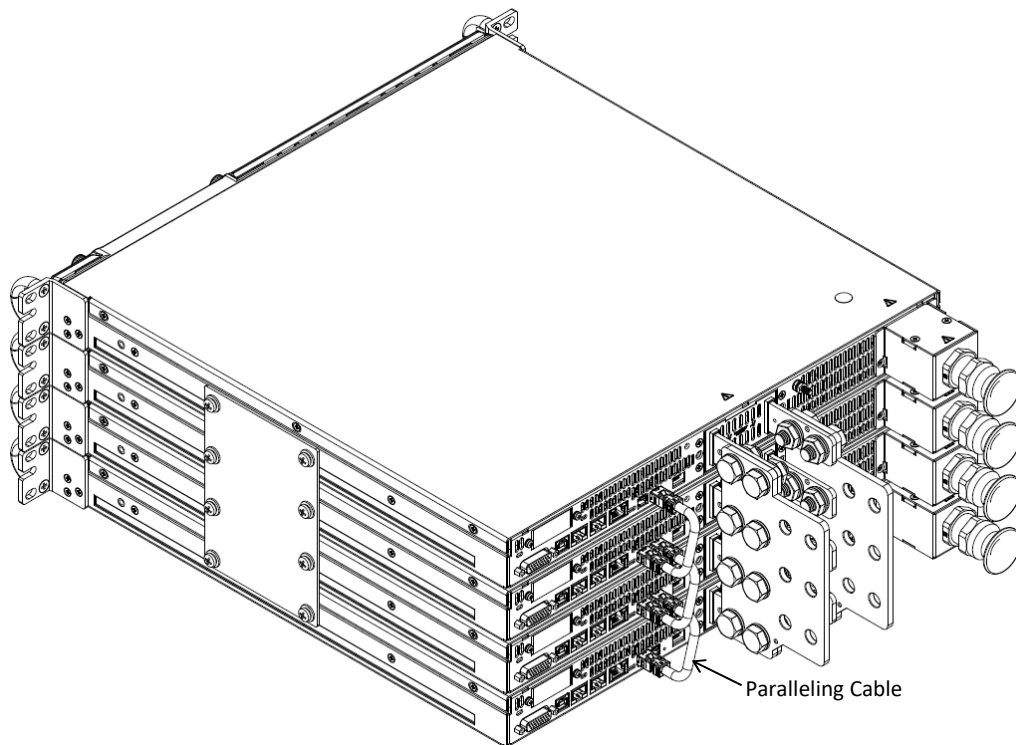
**Figure 1: Four 10V÷40V Units Connection Plates 4U Assembly**

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**

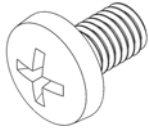




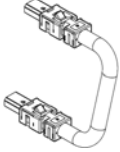
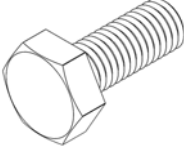



3. Connect three paralleling cables from top unit M connector to bottom unit S connector as illustrated in Figure 3.



**Figure 3: Four 10V÷40V Units Paralleling Cable Connection**

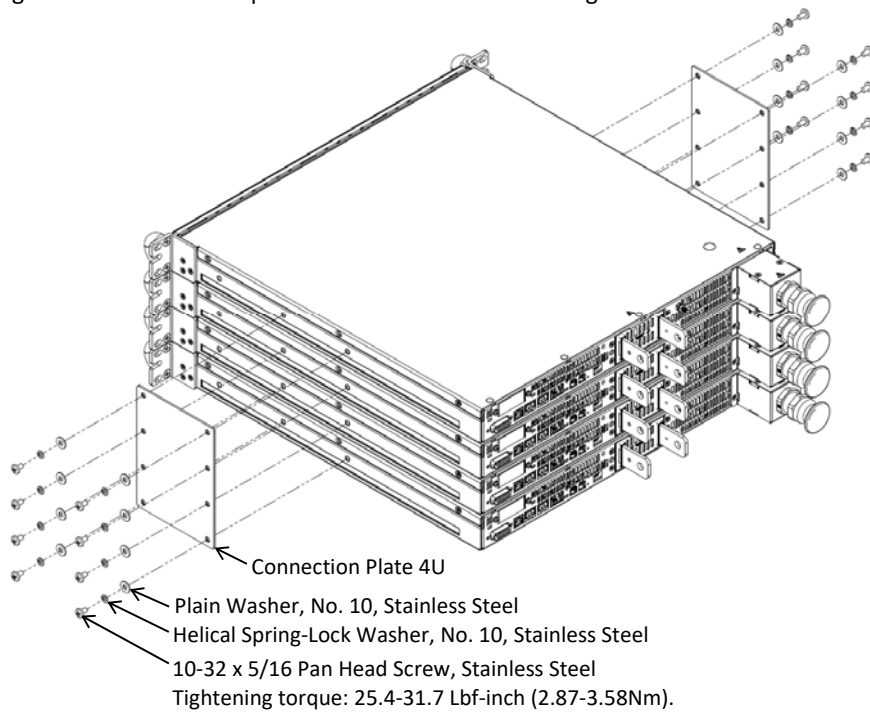
**1.4.2 G/P-4U-60-100V - Assembly Instructions for four 60V ÷ 100V units in Parallel**

**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

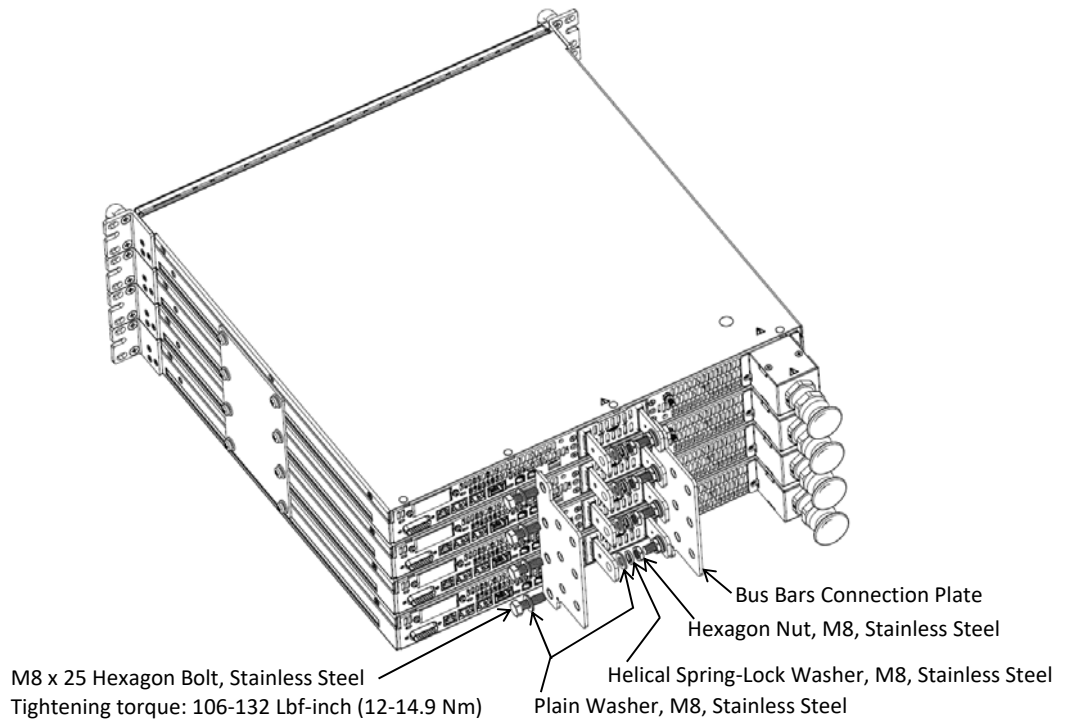
**1.4.2.2 Installation Steps**

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.



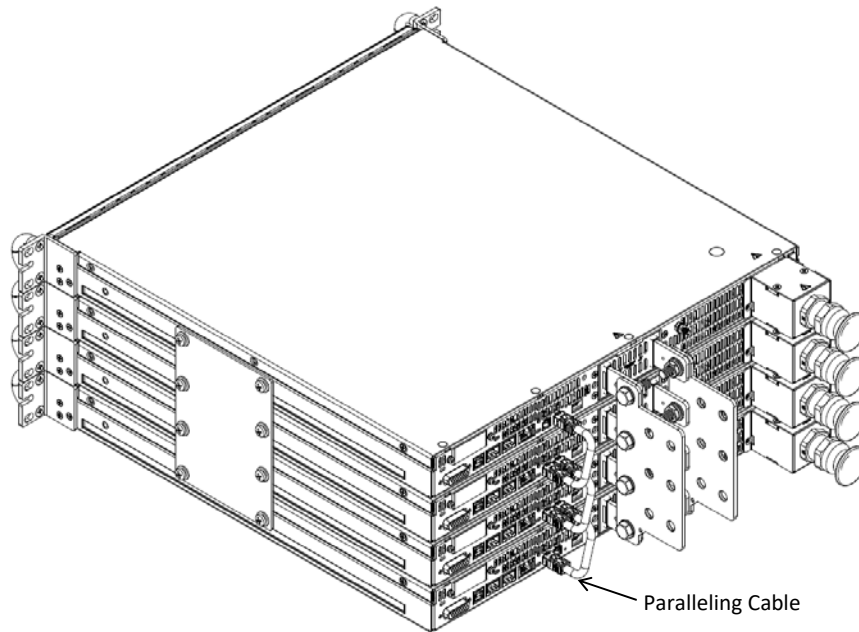
**Figure 4: Four 60V±100V Units Connection Plates 4U Assembly**

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**

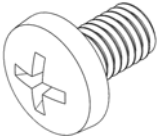



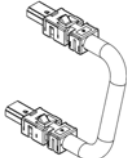
3. Connect three paralleling cables from top unit M connector to bottom unit S connector as illustrated in Figure 6.



**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**

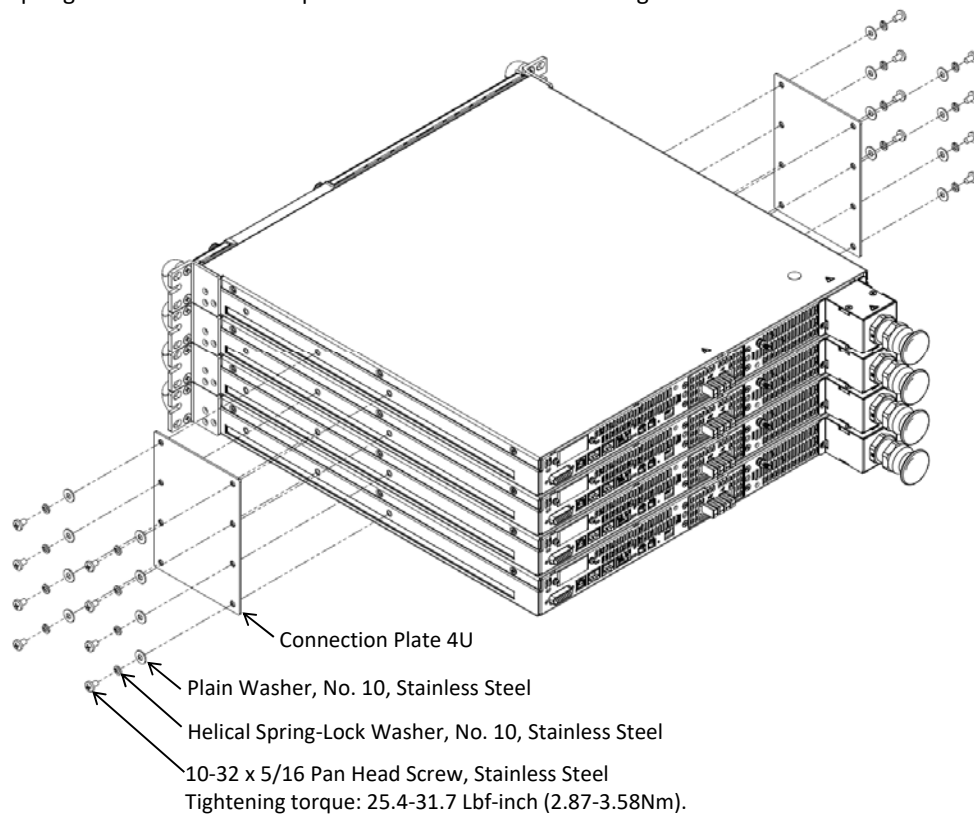
#### **1.4.3.1 Components List**

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



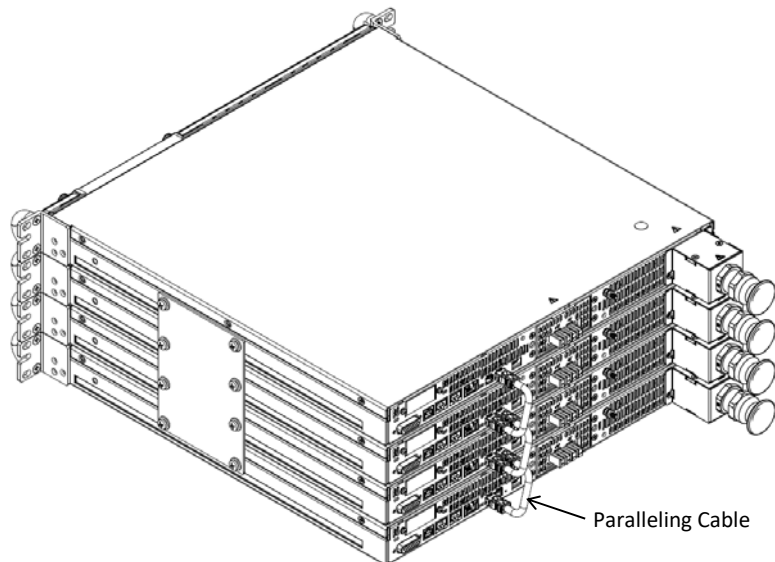
**1.4.3.2 Installation Steps**

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**