

# Manual Supplement

Manual Title:	5700A/5720A Series II Service	Supplement Issue:	6
Print Date:	November 2007	Issue Date:	7/09
Revision/Date:		Page Count:	3

---

---

This supplement contains information necessary to ensure the accuracy of the above manual. This manual is distributed as an electronic manual on the following CD-ROM:

CD Title:	5700A/5720A
CD Rev. & Date:	2, 2/2008
CD PN:	1668127

## Change #1, 48458

On page 1-13, under **General Specifications**, following **Safety**, add:

Operating Altitude ..... 2000 m  
 Pollution Degree ..... 2

## Change #2, 49361

On page 1-13, under **General Specifications**,

Change: **Safety** ..... Designed to comply with UL3111; EN61010; CSA C22.2 No. 1010; ANSI/ISA S82.01-1994

To: **Safety**..... Complies with IEC61010-1, (2nd Edition), CAN/CSA-C22.2 No. 61010-1-04, and UL Std. No. 61010-1 (2nd Edition)

## Change #3

On page 3-68, replace Table 3-37, with the following:

5700A/5720A Series II Output	Load Resistors	Frequency	Measured Distortion	Max. Distortion
2 V	100 Ω, 1/8 W	10 Hz		0.054 %
		20 Hz, 1 kHz, 20 kHz, 50 kHz		0.039 %
		100 kHz,		0.0405 %
		200 kHz		0.3055 %
		500 kHz		0.5055 %
20 V	1 Ω, ½ W	10 Hz		0.0535 %
		20 Hz, 20 kHz		0.0385 %
		100 kHz		0.054 %
		200 kHz, 500 kHz		0.304 %
200 V	10 KΩ, 5 W	10 Hz, 20 Hz, 50 kHz		0.055 %
		100 kHz		0.225 %
300 V <sup>[1]</sup>	15 KΩ, 5 W	40 Hz		0.1 %
300 V <sup>[1]</sup>	15 KΩ, 5 W	50 kHz		0.3 %
300 V <sup>[1]</sup>	15 KΩ, 5 W	70 kHz		0.4 %

[1] The 5700A/5720A Series II maximum volt-Hertz product is (2.2 x 10<sup>7</sup>). The 300V level assumes that a Fluke 5725A Amplifier is attached.

## Change #4

On page 3-39, replace step 1 with the following:

1. Connect the equipment as shown in Figure 3-15 and set the rear panel CALIBRATION
2. switch to the ENABLE position.

## Change #5

On page 5-9, Table 5-1 replace the F1 entry with the following:

Reference Designator	Description	Fluke Stock No.	Tot Qty	Notes
F1	FUSE,.25X1.25, 1.5A,250V,SLOW (200V, 220V, 230V, 240V)	109231	1	
	FUSE,.25X1.25, 3.0A,250V,SLOW (100V, 110V, 115V, 120V)	109280	1	

## Change #6, 50929

Replace page 1-35 with the following:

### AC Current Specifications

5720A Series II AC Current Specifications: 99 % Confidence Level

Range	Resolution	Frequency (Hz)	Absolute Uncertainty ± 5 °C from calibration temperature <sup>(1)</sup>				Relative Uncertainty ± 1 °C	
			24 Hours	90 Days	180 Days	1 Year	24 Hours	90 Days
			± (ppm output + nA)					
220 µA	1 nA	10 - 20	260 + 20	280 + 20	290 + 20	300 + 20	260 + 20	280 + 20
		20 - 40	170 + 12	180 + 12	190 + 12	200 + 12	130 + 12	150 + 12
		40 - 1 k	120 + 10	130 + 10	135 + 10	140 + 10	100 + 10	110 + 10
		1k - 5 k	300 + 15	320 + 15	340 + 15	350 + 15	250 + 15	280 + 15
		5k - 10 k	1000 + 80	1100 + 80	1200 + 80	1300 + 80	900 + 80	1000 + 80
2.2 mA	10 nA	10 - 20	260 + 50	280 + 50	290 + 50	300 + 50	260 + 50	280 + 50
		20 - 40	170 + 40	180 + 40	190 + 40	200 + 40	130 + 40	150 + 40
		40 - 1 k	120 + 40	130 + 40	135 + 40	140 + 40	100 + 40	110 + 40
		1k - 5 k	210 + 130	220 + 130	230 + 130	240 + 130	190 + 130	220 + 130
		5k - 10 k	1000 + 800	1100 + 800	1200 + 800	1300 + 800	900 + 800	1000 + 800
22 mA	100 nA	10 - 20	260 + 500	280 + 500	290 + 500	300 + 500	260 + 500	280 + 500
		20 - 40	170 + 400	180 + 400	190 + 400	200 + 400	130 + 400	150 + 400
		40 - 1 k	120 + 400	130 + 400	135 + 400	140 + 400	100 + 400	110 + 400
		1k - 5 k	210 + 700	220 + 700	230 + 700	240 + 700	190 + 700	220 + 700
		5k - 10 k	1000 + 6000	1100 + 6000	1200 + 6000	1300 + 6000	900 + 6000	1000 + 6000
			± (ppm output + µA)					
220 mA	1 µA	10 - 20	260 + 5	280 + 5	290 + 5	300 + 5	260 + 5	280 + 5
		20 - 40	170 + 4	180 + 4	190 + 4	200 + 4	130 + 4	150 + 4
		40 - 1 k	120 + 3	130 + 3	135 + 3	140 + 3	100 + 3	110 + 3
		1k - 5 k	210 + 4	220 + 4	230 + 4	240 + 4	190 + 4	220 + 4
		5k - 10 k	1000 + 12	1100 + 12	1200 + 12	1300 + 12	900 + 12	1000 + 12
2.2 A	10 µA	20 - 1 k	290 + 40	300 + 40	310 + 40	320 + 40	260 + 40	280 + 40
		1 k - 5 k	440 + 100	460 + 100	480 + 100	500 + 100	420 + 100	440 + 100
		5 k - 10 k	6000 + 200	7000 + 200	7500 + 200	8000 + 200	6000 + 200	7000 + 200
<b>5725A Amplifier:</b>								
11 A	100 µA	40 - 1 k	370 + 170	400 + 170	440 + 170	460 + 170	300 + 170	330 + 170
		1 k - 5 k	800 + 380	850 + 380	900 + 380	950 + 380	700 + 380	800 + 380
		5 k - 10 k	3000 + 750	3300 + 750	3500 + 750	3600 + 750	2800 + 750	3200 + 750
<p>Note:</p> <p>Maximum output from the calibrator's terminals is 2.2 A. Uncertainty specifications for 220 µA and 2.2 mA ranges are increased by a factor of 1.3 plus 2 µA when supplied through 5725A terminals. For the 5720A 220 µA range, 1 kHz through 5 kHz and 5 kHz through 10 kHz, when the output is coming from the AUX current terminal, use the 5700A Absolute Uncertainty Specifications. Specifications are otherwise identical for all output locations.</p> <p>1. For fields strengths &gt;0.4 V/m but ≤3 V/m, add 1 % of range.</p>								

Replace page 1-36 with the following:

**5720A Series II AC Current Specifications: 95% Confidence Level**

Range	Resolution	Frequency (Hz)	Absolute Uncertainty ± 5 °C from calibration temperature <sup>[1]</sup>				Relative Uncertainty ± 1 °C	
			24 Hours	90 Days	180 Days	1 Year	24 Hours	90 Days
			± (ppm output + nA)					
220 µA	1 nA	10 - 20	210 + 16	230 + 16	240 + 16	250 + 16	210 + 16	230 + 16
		20 - 40	130 + 10	140 + 10	150 + 10	160 + 10	110 + 10	130 + 10
		40 - 1 k	100 + 8	110 + 8	115 + 8	120 + 8	80 + 8	90 + 8
		1k - 5 k	240 + 12	250 + 12	270 + 12	280 + 12	200 + 12	230 + 12
		5k - 10 k	800 + 65	900 + 65	1000 + 65	1100 + 65	700 + 65	800 + 65
2.2 mA	10 nA	10 - 20	210 + 40	230 + 40	240 + 40	250 + 40	210 + 40	230 + 40
		20 - 40	130 + 35	140 + 35	150 + 35	160 + 35	110 + 35	130 + 35
		40 - 1 k	100 + 35	110 + 35	115 + 35	120 + 35	80 + 35	90 + 35
		1k - 5 k	170 + 110	180 + 110	190 + 110	200 + 110	160 + 110	170 + 110
		5k - 10 k	800 + 650	900 + 650	1000 + 650	1100 + 650	700 + 650	800 + 650
22 mA	100 nA	10 - 20	210 + 400	230 + 400	240 + 400	250 + 400	210 + 400	230 + 400
		20 - 40	130 + 350	140 + 350	150 + 350	160 + 350	110 + 350	130 + 350
		40 - 1 k	100 + 350	110 + 350	115 + 350	120 + 350	80 + 350	90 + 350
		1k - 5 k	170 + 550	180 + 550	190 + 550	200 + 550	160 + 550	170 + 550
		5k - 10 k	800 + 5000	900 + 5000	1000 + 5000	1100 + 5000	700 + 5000	800 + 5000
			± (ppm output + µA)					
220 mA	1 µA	10 - 20	210 + 4	230 + 4	240 + 4	250 + 4	210 + 4	230 + 4
		20 - 40	130 + 3.5	140 + 3.5	150 + 3.5	160 + 3.5	110 + 3.5	130 + 3.5
		40 - 1 k	100 + 2.5	110 + 2.5	115 + 2.5	120 + 2.5	80 + 2.5	90 + 2.5
		1k - 5 k	170 + 3.5	180 + 3.5	190 + 3.5	200 + 3.5	160 + 3.5	170 + 3.5
		5k - 10 k	800 + 10	900 + 10	1000 + 10	1100 + 10	700 + 10	800 + 10
2.2 A	10 µA	20 - 1 k	230 + 35	240 + 35	250 + 35	260 + 35	200 + 35	230 + 35
		1 k - 5 k	350 + 80	390 + 80	420 + 80	450 + 80	300 + 80	350 + 80
		5 k - 10 k	5000 + 160	6000 + 160	6500 + 160	7000 + 160	5000 + 160	6000 + 160
<b>5725A Amplifier:</b>								
11 A	100 µA	40 - 1 k	370 + 170	400 + 170	440 + 170	460 + 170	300 + 170	330 + 170
		1 k - 5 k	800 + 380	850 + 380	900 + 380	950 + 380	700 + 380	800 + 38
		5 k - 10 k	3000 + 750	3300 + 750	3500 + 750	3600 + 750	2800 + 750	3200 + 750
<p>Note:</p> <p>Maximum output from the calibrator's terminals is 2.2 A. Uncertainty specifications for 220 µA and 2.2 mA ranges are increased by 1.3 plus 2 µA when supplied through 5725A terminals. For the 5720A 220 µA range, 1 kHz through 5 kHz and 5 kHz through 10 kHz, when the output is coming from the AUX current terminal, use the 5700A Absolute Uncertainty Specifications. Specifications are otherwise identical for all output locations.</p> <p>1. For fields strengths &gt;0.4 V/m but ≤3 V/m, add 1 % of range.</p>								