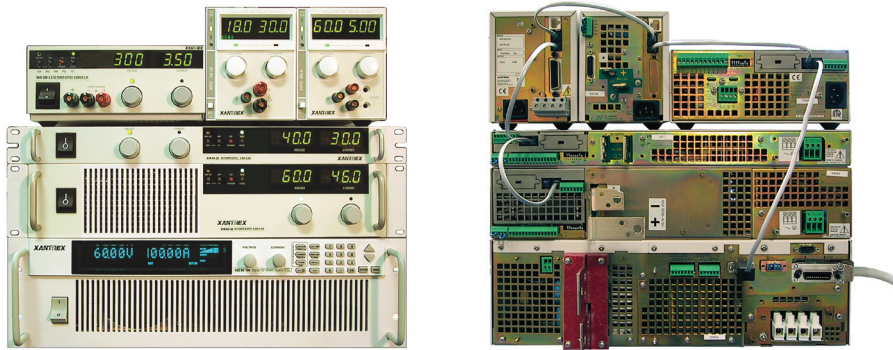


# GPIB-M Multichannel Interface

Digital Interface For Multiple Unit Programming, Control, and Auto Sequencing



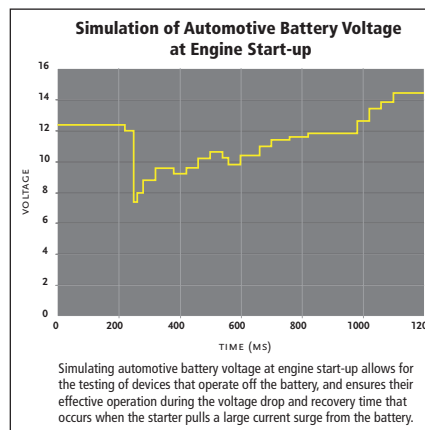
Front and rear views of a Xantrex XDC 6 kW, XFR 2.8 kW and 1.2 kW, XHR 1 kW, XPD 500 W, and an HPD 300 W configured with GPIB-M.

## Conveniently Connects Multiple Units

The Xantrex GPIB-M multichannel interface is a full-featured, IEEE 488.2 SCPI compatible interface option usable with all Xantrex programmable DC power supplies from 60 W to 12 kW. GPIB-M offers the flexibility to remotely control up to 50 supplies - each with a GPIB-M or CANbus communications link installed - by multichannel addressing from a single GPIB address.

## Provides Auto Sequence Capability

GPIB-M uses the functionality from the Xantrex Digital Controlled power supply (XDC Series) and makes it available for other Xantrex products - the XFR, XHR, XPD, HPD, and XT Series. The auto sequencing capability enables test sequences, which have been programmed externally via GPIB, to be launched with a GPIB command. Up to ten different test programs, each with up to 99 voltage level steps ranging from milliseconds to days, can be executed by a GPIB command or an external trigger. This sequencing capability can be used for a variety of applications including constructing simple voltage ramps, battery charging and simulation of battery voltage at engine start-up, component testing, and MIL 704E testing.



## Product Features

- ▶ High speed 16-bit programming and readback of voltage and current
- ▶ Programmable soft limits for voltage and current
- ▶ Software calibration
- ▶ Programmable auxiliary status lines
- ▶ Local Lockout capability
- ▶ Remote interlock and trigger lines
- ▶ Selectable standby, programmed sequence and other power-on defaults
- ▶ Extensive SCPI command set for control and status monitoring
- ▶ Support of legacy Xantrex GPIB commands

## Protection Features

- ▶ Programmable over voltage, under voltage, and current protection
- ▶ Shutdown or warning for over/under-programmed trip points

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# GPIB-M Multichannel Interface

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## Typical Specifications With GPIB-M or CANbus Installed

<b>XFR 2.8 kW</b>		<b>7.5-300</b>	<b>12-220</b>	<b>20-130</b>	<b>33-85</b>	<b>40-70</b>	<b>60-46</b>	<b>100-28</b>	<b>150-18</b>	<b>300-9</b>	<b>600-4</b>
<b>Program Resolution</b>	<b>Voltage (mV)</b>	0.13	0.2	0.34	0.55	0.67	1.01	1.68	2.52	5.04	10.1
	<b>Current (mA)</b>	5.04	3.69	2.18	1.50	1.17	0.77	0.47	0.3	0.15	0.07
<b>Program Accuracy</b>	<b>Voltage (mV) (0.2% + 10 mV)</b>	25	34	50	76	90	130	210	310	610	1210
	<b>Current (mA) (0.3% +10 mA)</b>	910	670	400	265	220	148	94	64	37	22
<b>Readback Resolution</b>	<b>Voltage (mV)</b>	0.13	0.2	0.34	0.55	0.67	1.01	1.68	2.52	5.04	10.1
	<b>Current (mA)</b>	5.04	3.69	2.18	1.50	1.17	0.77	0.47	0.3	0.15	0.07
<b>Readback Accuracy</b>	<b>Voltage (mV) (0.2% + 20 mV)</b>	35	44	60	86	100	140	220	320	620	1220
	<b>Current (mA) (0.3% +20 mA)</b>	920	680	410	275	230	158	104	74	47	32

<b>XFR 1.2 kW</b>		<b>6-200</b>	<b>7.5-140</b>	<b>12-100</b>	<b>20-60</b>	<b>35-35</b>	<b>40-30</b>	<b>60-20</b>	<b>100-12</b>	<b>150-8</b>	<b>300-4</b>	<b>600-2</b>
<b>Program Resolution</b>	<b>Voltage (mV)</b>	0.10	0.13	0.2	0.34	0.59	0.67	1.01	1.68	2.52	5.04	10.1
	<b>Current (mA)</b>	3.36	2.35	1.68	1.01	0.59	0.5	0.34	0.2	0.13	0.07	0.03
<b>Program Accuracy</b>	<b>Voltage (mV) (0.2% + 10 mV)</b>	22	25	34	50	80	90	130	210	310	610	1210
	<b>Current (mA) (0.3% +10 mA)</b>	610	430	310	190	115	100	70	46	34	22	16
<b>Readback Resolution</b>	<b>Voltage (mV)</b>	0.10	0.13	0.2	0.34	0.59	0.67	1.01	1.68	2.52	5.04	10.1
	<b>Current (mA)</b>	3.36	2.35	1.68	1.01	0.59	0.5	0.34	0.2	0.13	0.07	0.03
<b>Readback Accuracy</b>	<b>Voltage (mV) (0.2% + 20 mV)</b>	32	35	44	60	90	100	140	220	320	620	1220
	<b>Current (mA) (0.3% +20 mA)</b>	620	440	320	200	125	110	80	56	44	32	26

<b>XHR 1 kW</b>		<b>7.5-130</b>	<b>20-50</b>	<b>33-33</b>	<b>40-25</b>	<b>60-18</b>	<b>100-10</b>	<b>150-7</b>	<b>300-3.5</b>	<b>600-1.7</b>
<b>Program Resolution</b>	<b>Voltage (mV)</b>	0.13	0.34	0.55	0.67	1.01	1.68	2.52	5.04	10.1
	<b>Current (mA)</b>	2.18	0.84	0.55	0.42	0.3	0.17	0.12	0.06	0.03
<b>Program Accuracy</b>	<b>Voltage (mV) (0.2% + 10 mV)</b>	25	50	76	90	130	210	310	610	1210
	<b>Current (mA) (0.3% +10 mA)</b>	400	160	109	85	64	40	31	21	15
<b>Readback Resolution</b>	<b>Voltage (mV)</b>	0.13	0.34	0.55	0.67	1.01	1.68	2.52	5.04	10.1
	<b>Current (mA)</b>	2.18	0.84	0.55	0.42	0.3	0.17	0.12	0.06	0.03
<b>Readback Accuracy</b>	<b>Voltage (mV) (0.2% + 20 mV)</b>	35	60	86	100	140	220	320	620	1220
	<b>Current (mA) (0.3% +20 mA)</b>	410	170	119	95	74	50	41	31	25

<b>XPD 500 W</b>		<b>7.5-67</b>	<b>18-30</b>	<b>33-16</b>	<b>60-9</b>	<b>120-4.5</b>
<b>Program Resolution</b>	<b>Voltage (mV)</b>	0.13	0.30	0.55	1.01	2.01
	<b>Current (mA)</b>	1.12	0.50	0.27	0.15	0.08
<b>Program Accuracy</b>	<b>Voltage (mV) (0.2%+10 mV)</b>	25	46	76	130	250
	<b>Current (mA) (0.3%+10 mA)</b>	211	100	58	37	23.5
<b>Readback Resolution</b>	<b>Voltage (mV)</b>	0.13	0.30	0.55	1.01	2.01
	<b>Current (mA)</b>	1.12	0.50	0.27	0.15	0.08
<b>Readback Accuracy</b>	<b>Voltage (mV) (0.2%+20 mV)</b>	35	56	86	140	260
	<b>Current (mA) (0.3%+20 mA)</b>	221	110	68	47	33.5

<b>HPD 300 W and XT 60 W</b>		<b>HPD</b>	<b>15-20</b>	<b>30-10</b>	<b>60-5</b>	<b>XT</b>	<b>7-6</b>	<b>15-4</b>	<b>20-3</b>	<b>30-2</b>	<b>60-1</b>	<b>120-0.5</b>	<b>250-0.25</b>
<b>Program Resolution</b>	<b>Voltage (mV)</b>		0.25	0.5	1.01		0.12	0.25	0.34	0.5	1.01	2.01	4.2
	<b>Current (mA)</b>		0.34	0.17	0.08		0.1	0.07	0.05	0.03	0.02	0.01	0.01
<b>Program Accuracy</b>	<b>Voltage (mV) (0.2%+10 mV)</b>		40	70	130		24	40	50	70	130	250	510
	<b>Current (mA) (0.3%+10 mA)</b>		70	40	25		28	22	19	16	13	11.5	10.8
<b>Readback Resolution</b>	<b>Voltage (mV)</b>		0.25	0.5	1.01		0.12	0.25	0.34	0.5	1.01	2.01	4.2
	<b>Current (mA)</b>		0.34	0.17	0.08		0.1	0.07	0.05	0.03	0.02	0.01	0.01
<b>Readback Accuracy</b>	<b>Voltage (mV) (0.2%+20 mV)</b>		50	80	140		34	50	60	80	140	260	520
	<b>Current (mA) (0.3%+20 mV)</b>		80	50	35		38	32	29	26	23	21.5	21

Note: Specifications subject to change without notice.

For more information, call 800 667 8422 or visit [www.xantrex.com](http://www.xantrex.com).