

FlexPoint™ AX Series

FTTP ONT UPS System




- Scalable FTTH/FTTx power supply systems with and without standby capability
- Full or partial outdoor configurations
- Outdoor rated including battery for 24/7 availability
- Utility meter base provides most reliable source of AC power at home
- No homeowner appointments needed for access and maintenance
- Safe, low voltage distribution
- 30W continuous output power

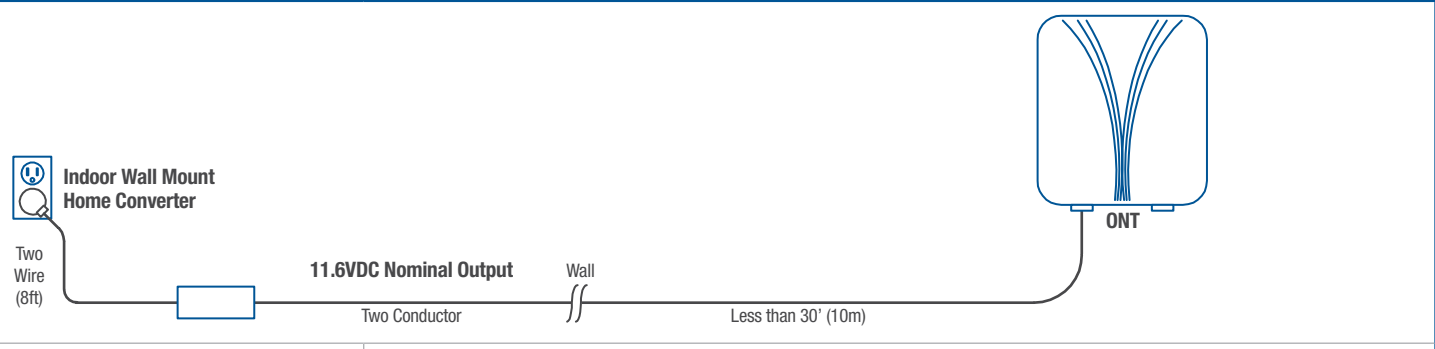
Alpha's FlexPoint AX Series fiber to the premise (FTTP) Optical Network Terminal (ONT) power supply system provides network operators a highly reliable, scalable set of solutions for full or partial outdoor installations.

These systems provide a lower cost of ownership than competing powering technologies. The FlexPoint AX power ring with AC/DC power converter module taps AC power from the utility meter base, the most reliable source of power at the home, outputting 12VDC. This provides service technicians 24/7 availability to the power system, eliminating the need to coordinate maintenance house calls with the subscriber.

The FlexPoint AX home converter's 22-year Meantime Before Failure (MTBF) provides a partial indoor solution. It is plugged into a subscriber's AC outlet, outputting 12VDC to the outdoor battery backup power supply or directly to the ONT. Standard and extended standby runtime modules can be added when primary line telephone service is subscribed.

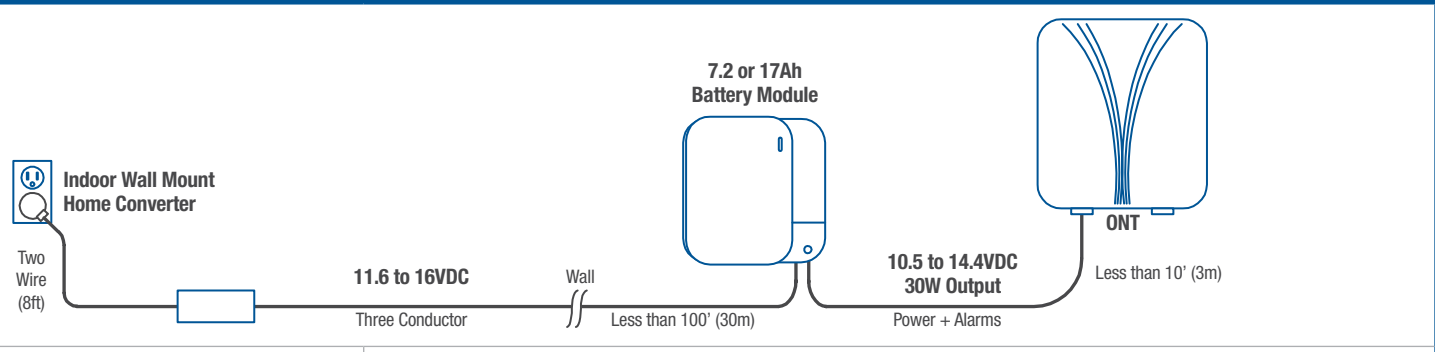
Module Descriptions	
	<p>Power-Ring Compatible with ring and ringless style meter sockets and provides a receiving socket for the FlexPoint AC to DC power-ring converter module. Depending on the model the power-ring can tap the AC power before or after the meter and comes supplied with a blanking plate.</p> <p>175A Continuous, 240V Rated Models: AX-POWER-RING-A (power tab after meter)— p/n 021-053-21 AX-POWER-RING-B (power tab before meter)— p/n 021-053-20</p> <ul style="list-style-type: none"> • Weight (lb/kg): 1.5 / 0.68 • Dimensions H x Dia (in/mm): 4.75 x 7 / 120 x 178
	<p>Power-Ring Converter Contains highly-reliable environmentally-hardened 240VAC to 12VDC converter circuitry in a pluggable housing. Outputs 30W and 11.6VDC as a stand-alone module, or 30W and 11.4 to 16VDC to support battery backup power supply (BBPS) module.</p> <p>Model: AX30-12D-SFPC— p/n 010-318-50</p> <ul style="list-style-type: none"> • Weight (lb/kg): 1.14 / 0.52 • Dimensions H x W x D (in/mm): 9.2 x 6.0 x 1.75 / 233.7 x 152.4 x 44.5
	<p>Home Converter Contains highly-reliable environmentally-hardened 120VAC to 12VDC converter circuitry in a wall mount housing. Comes with a two-conductor AC line cord and should be mounted in locations sheltered from rain or snow. Outputs 24W and 11.6VDC as a stand-alone module, or supports 30W and 11.6 to 16VDC battery backup power supply (BBPS) module output.</p> <p>Model: AX30-120-HC— p/n 010-318-39</p> <ul style="list-style-type: none"> • Weight (lb/kg): 0.7 / 0.32 • Dimensions H x W x D (in/mm): 8.25 x 2.75 x 1.5 / 209 x 70 x 38
	<p>Battery Modules The Battery Backup Power Supply (BBPS) module outputs 30W of continuous power and includes a microprocessor-based battery charge management system providing the correct charge voltage to the battery over a wide temperature range, while performing periodic battery capacity testing and status reporting to the ONT and customer. The onboard battery heater provides extended standby runtimes in cold conditions to -40°C. The 7.2Ah battery model provides standard runtimes and the 17Ah model provides extended runtimes.</p> <p>Model: AX-12D-BBPS-7.2-LPS— p/n 031-264-22</p> <ul style="list-style-type: none"> • Weight (lb/kg): 1.5 / .68 • Dimensions H x W x D (in/mm): 8.0 x 9.0 x 4.0 / 203 x 230 x 102 <p>Model: AX-12D-BBPS-17-LPS— p/n 031-192-32</p> <ul style="list-style-type: none"> • Weight (lb/kg): 4.5 / 2.04 • Dimensions H x W x D (in/mm): 14 x 9.5 x 5.0 / 355 x 241 x 127
	<p>UPS Modules Provides the network operator the capability to place the battery management element inside other enclosures located at the subscriber's home. UPS modules contain the same electronics used in the AX-12D-BBPS products without the battery heater and are to be used with the FlexPoint home converter and power-ring converter</p> <p>Model: AX-12D-7.2Ah (for 7.2Ah battery)— p/n 745-816-21-011</p> <p>Model: AX-12D-17Ah (for 17Ah battery)— p/n 745-816-20-010</p>
	<p>Batteries The FlexPoint AX battery modules use maintenance-free sealed lead acid.</p> <p>Model: AX-STDBAT-7— p/n 181-036-10</p> <ul style="list-style-type: none"> • Features: Standard-life 7.2Ah AGM battery, 1-year warranty <p>Model: AX-LONGBAT-7— p/n 181-063-10</p> <ul style="list-style-type: none"> • Features: Long-life 7.0Ah AGM battery, 3-year warranty • Weight (lb/kg): 5 / 2.27 <p>Model: AX-STDBAT-17— p/n 181-022-10</p> <ul style="list-style-type: none"> • Features: Standard-life 17Ah AGM battery, 1-year warranty • Weight (lb/kg): 13 / 5.9

Indoor Powering—Non-UPS



Operational Temperature Range: -40 to 113°F (-40 to 45°C)

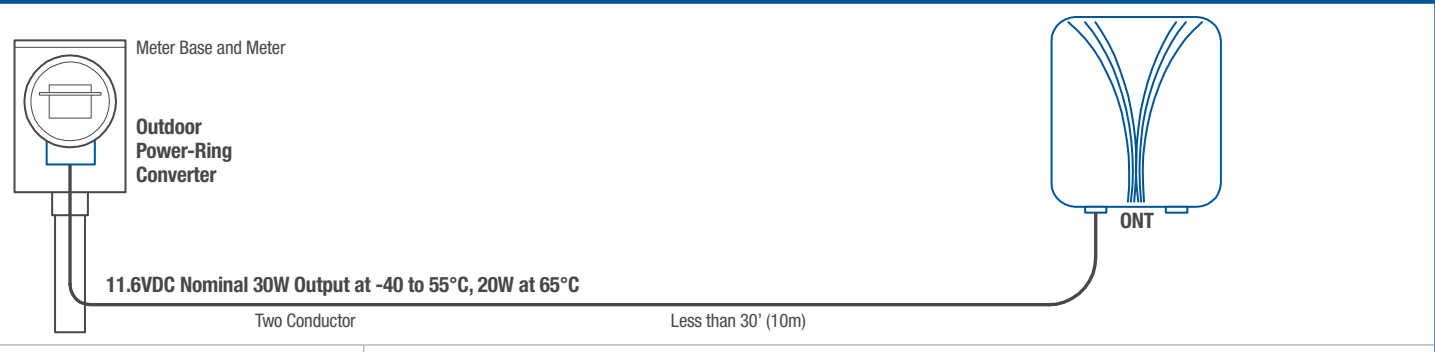
Indoor Powering—UPS



Operational Temperature Indoor Range: -40 to 113°F (-40 to 45°C)

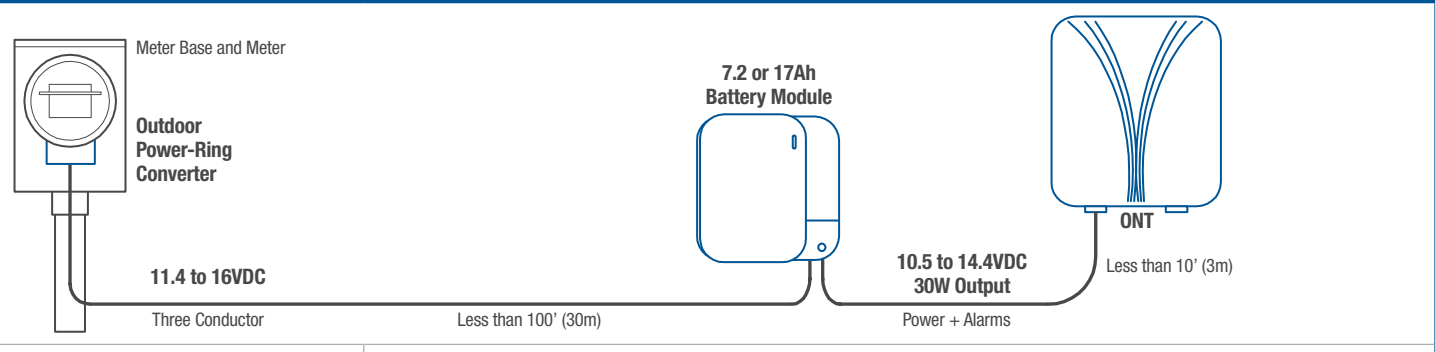
Operational Temperature Outdoor Range: -40 to 113°F (-40 to 45°C)

Outdoor Powering—Non-UPS



Operational Temperature Range: -40 to 149°F (-40 to 65°C)

Outdoor Powering—UPS



Operational Temperature Range: -40 to 113°F (-40 to 45°C)

Input (International AC Selections and Line Cords Available)	
AC Input Voltage:	AX30-12D-HC: 85 to 132VAC (120VAC nominal) AX30-12D-SFPC: 216 to 254VAC (240VAC nominal)
AC Input Frequency:	AX30-12D-HC: 50 to 60Hz AX30-12D-SFPC: 60Hz

Output	
DC Output Voltage:	SFPC + BBPS / HC + BBPS (UPS System): 10.5 to 14.4VDC SFPC / HC (Non-UPS System): 11.6VDC
Continuous Output Power:	HC + BBPS (UPS System): 30W at nominal battery float charge SFPC + BBPS (UPS System): 30W at nominal battery float charge HC (Non-UPS System): 24W SFPC (Non-UPS System): 30W @ -40 to 55°C, 20W @ 65°C
Current Limit:	2.4A current limit (HC), 3.2A current limit (SFPC)
Short Circuit Protection:	Electronic
DC Ripple:	150mV

Environment	
Operating Temperature Range:	AX30-12D-SFPC + BBPS: -40 to 113°F (-40 to 45°C) AX30-12D-HC + BBPS: -40 to 113°F (-40 to 45°C) AX30-12D-HC: -40 to 113°F (-40 to 45°C) AX30-12D-SFPC: -40 to 149°F (-40 to 65°C) unit derates above 131°F (55°C)
Humidity:	0 to 95%
Battery Storage:	5 to 149°F (-15 to 65°C), 0 to 95% humidity
Elevation Operation Max:	10,000ft (3000m)
Elevation Storage Max:	50,000ft (15000m)

Battery	
Type:	Maintenance-free, leak-proof, sealed VRLA (valve regulated lead acid)
Typical Recharge Time:	AX-12D-BBPS-7.2: <16hrs with 24W load AX-12D-BBPS-17: <36hrs with 24W load

Regulatory Approvals	
Home Converter:	NRTL/C LPS, FCC Part 15 Class B, UL/CSA UR UL 60950-1
Power-Ring:	UR UL414
Power-Ring Converter:	UR UL60950-1, UL SU2745
BBPS Modules:	NRTL/C

Warranty	
Electronics:	2 year
Battery (standard):	1 year
Battery (long life):	3 year

Status Alarms (Local LED Indicators)	
Green Steady:	Output OK
Green Blinking:	Standby operation
Red Steady:	Replace battery
Red Blinking:	Battery missing / battery low

Remote Status Alarms (PacketCable Compliant)	
AC Fail:	Output power drawn from battery
Replace Battery:	Battery has failed periodic self-test
Battery Missing:	Battery is disconnected
Battery Low:	Battery has less than 20% remaining runtime

Supporting BBPS Models	
AX-12D-BBPS-7.2-LPS:	Part Number: 031-264-22 Weight (lb/kg): 1.5 / .68 Dimensions H x W x D (in/mm): 8.0 x 9.0 x 4.0 / 203 x 230 x 102
AX-12D-BBPS-17-LPS:	Part Number: 031-192-32 Weight (lb/kg): 4.5 / 2.04 Dimensions H x W x D (in/mm): 14 x 9.5 x 5.0 / 355 x 241 x 127

FlexPoint UPS Runtimes Over Temperature (minutes)			
7.2Ah	-40°F (-40°C)	-4°F (-20°C)	77°F (25°C)
7W:	360	560	800
10W:	160	360	500
15W:	110	195	320
18W:	80	156	240
20W:	60	130	210
25W:	50	100	170
30W:	30	80	130

FlexPoint UPS Runtimes Over Temperature (minutes)			
17Ah	-40°F (-40°C)	-4°F (-20°C)	77°F (25°C)
10W:	750	1080	1240
15W:	400	680	940
20W:	60	440	680
25W:	160	340	480
30W:	140	232	400



Worldwide Corporate Offices

North America Tel: +1 360.647.2360 Fax: +1 360.671.4936	Europe Tel: +49 9122.79889.0 Fax: +49 9122.79889.21
--	--

Latin America Tel: +561 792.9651 Fax: +561 792.7157	Asia Pacific Tel: +852 2736.8663 Fax: +852 2199.7988
--	---

