

ABB string inverters Warranty program

Standard warranty

The Standard Warranty Agreement from ABB includes:

- Five (5) to Ten (10) year warranty depending on product and market
- Ten (10) days shipment guarantee of replacement unit/parts once unit/part are received at ABB repair depot
- Access to Technical Hotline for support and troubleshooting
- Access to global Field Service and Partner Network for on-site commissioning support, troubleshooting, repair, training and system customization

Assure warranty

The Assure Warranty Agreement from ABB includes all the attributes of the Standard Warranty Agreement with the added benefits of:

- 72-hour response time to any on-site emergency service request
- Three (3) to Five (5) days (typical) advanced swap shipment
- Execution of Replacement (or flat-fee compensation)

Advantage warranty

The Advantage Warranty Level Agreement includes all the attributes of the Assure Warranty Level Agreement with the added benefit of:

- 48-hours response to any on-site emergency service request
- Payment for lost production based on Annual Uptime Guarantee - £1.00/kW x nom. AC-Power-rating of the inverter or module that is down per day beyond guarantee: 98% - 7 Days.

Offer description	Standard	Assure (*)	Advantage (*)
Standard warranty period	Five (5) to Ten (10) years based on product and market. See Standard Product Warranty table.		
Global locations	Globally available, except the Default countries at ASSURE level	Default in: see table for global location	Available in countries that offer ASSURE
Technical hot line	Included		
Warranty extension options	Upgrade to Assure there available on request.	Five (5), Ten (10) and Fifteen (15) year warranty extensions are available	
Free freight for returns (includes all freight to and from ABB)	N/A	Included	
Swap units shipped (unit swapped prior to return of original units)	N/A	Typically within 3-5 days	Typically within 2-3 days
Emergency on-site repair	N/A	72 Hours	48 Hours
Emergency on-site repair labor compensated when not executed by ABB	N/A	Included	
Production loss compensation	N/A	N/A	Beyond the uptime, lost kW nameplate rating of unit/day
Yearly uptime guarantee	N/A	N/A	98%

(*)SLA and related warranty extension can be purchased only in countries listed in the "Global Location" section; for information regarding a country not listed please refer to your local Service/Sales ABB representative.

Standard warranty

We offer the Standard Warranty Level for customers outside of ABB's normal service area. Typically, customers covered under our Standard Warranty purchase a local inventory of spare parts. The customer is responsible for the swap and shipment to and from

ABB for any units in need of repair. The repair, labor, and material is fully covered during the warranty period. Since the spare parts or inverters are already on site, the urgency to restock the inventory is reduced. ABB will repair defective units and ship refurbished units back to the customer within 10-business days of receipt at the ABB repair depot.

Assure warranty

We offer the Assure Warranty Level for customers who prefer for ABB to stock the inventory and provide a fast response in the event they need a spare part. At the Assure Level ABB commits to shipment of the part within 3-5 days of notification. We can typically ship the part within 2 days, but allow additional days for receipt to account for weekends, holidays and remote locations.

ABB is responsible for the swap using ABB personnel or one of our authorized partners.

If the Installatuer make the exchange itself, he is entitled to a fixed exchange fee.

In summary, customers receive the needed parts and a complete emergency response team ready to help you at any time with the Assure Program from ABB.

Advantage warranty

We offer the Advantage Warranty Level for customers who want complete "peace of mind". In some financing scenarios lenders may ask for additional debt service security. They may want a third party to have some "skin in the game". Here ABB will guarantee lost production through our Uptime Warranty. ABB commits to shipment of the part within 2-3 days of notification, and payment for lost production. Customers can request an Uptime Guarantee of 98% per year. ABB is responsible for the swap.

In the event the ABB equipment is down longer than the Uptime Guaranteed we agree to pay for lost production based on - 1.00/kW x nom. AC-Power-rating of the inverter or module that is down per day.

Payout per each lost kWh beyond the granted percentage is given by the following formula:

$$\text{payout} = \text{£ amount per kW} * \text{nameplate rating of unit} * \text{number of Down Days beyond Uptime Guarantee}$$

Payout example: 98% = 7 days

1 x 10kW inverter is down for 9 days in a calendar year, the payout with 98% will be 2 days x 10kW x £1.00 = £20.00.

If the startup won't be at the beginning of the year the calculation will be done on a pro-rata base.

The compensation claims needs to be reported max. 3 month after the replacement of the broken units.

The yearly summary needs to be reported within the first 3 months of the following calendar year.

PRODUCT	NORTHAMERICA	WORLDWIDE EXCEPT NORTH AMERICA
Single Phase String PV Inverter	10 Years from shipment	5 Years from shipment
Three Phase String PV Inverter	(5*) - 10 years from shipment (*PRO-33.0; Project TRIO 20.0/ 27.5)	(5*) - 10 years from shipment (*PRO-33.0; Project TRIO 20.0/ 27.5)
Wind Inverters	5 Years from shipment	2 Years from shipment
Accessories	2 Years from shipment	2 Years from shipment
Aurora Vision® Monitoring	2 Years from shipment	2 Years from shipment

The following Global Locations Table lists the ABB Regions and the ABB base-level service agreements provided in each country. The base-level offered in each country is either Standard or Assure as shown by the check mark.

Code	Name	Code	Country	Standard	Assure
NEU	Northern Europe	AZ	Azerbaijan	x	
NEU	Northern Europe	DK	Denmark		X
NEU	Northern Europe	EE	Estonia		X
NEU	Northern Europe	FI	Finland		X
NEU	Northern Europe	GG	Guernsey	x	
NEU	Northern Europe	IE	Ireland		X
NEU	Northern Europe	JE	Jersey	x	
NEU	Northern Europe	KZ	Kazakhstan	x	
NEU	Northern Europe	LV	Latvia	x	
NEU	Northern Europe	LT	Lithuania	x	
NEU	Northern Europe	NO	Norway		X
NEU	Northern Europe	RU	Russian federation	x	
NEU	Northern Europe	SE	Sweden		X
NEU	Northern Europe	GB	United kingdom		X
NEU	Northern Europe	UZ	Uzbekistan	x	
CEU	Central Europe	AT	Austria		X
CEU	Central Europe	BE	Belgium		X
CEU	Central Europe	BG	Bulgaria	x	
CEU	Central Europe	CZ	Czech republic		X
CEU	Central Europe	DE	Germany		X
CEU	Central Europe	HU	Hungary		X
CEU	Central Europe	LU	Luxembourg		X
CEU	Central Europe	NL	Netherlands		X
CEU	Central Europe	PL	Poland		X
CEU	Central Europe	RO	Romania		X
CEU	Central Europe	SK	Slovakia		X
CEU	Central Europe	SI	Slovenia		X
CEU	Central Europe	CH	Switzerland		X
CEU	Central Europe	UA	Ukraine	X	
MED	Mediterranean	DZ	Algeria	x	
MED	Mediterranean	HR	Croatia		X
MED	Mediterranean	FR	France		X
MED	Mediterranean	GR	Greece		X
MED	Mediterranean	IL	Israel		X
MED	Mediterranean	IT	Italy		X
MED	Mediterranean	MT	Malta	x	
MED	Mediterranean	MA	Morocco	x	
MED	Mediterranean	PT	Portugal		X
MED	Mediterranean	RS	Serbia	x	
MED	Mediterranean	ES	Spain		X
MED	Mediterranean	TN	Tunisia	x	
MED	Mediterranean	TR	Turkey	x	
NAM	North America	CA	Canada		X
NAM	North America	MX	Mexico	x	
NAM	North America	US	United states		X
NAM	North America	VI	Virgin islands (us)	x	
SAM	South America	AR	Argentina	x	
SAM	South America	BB	Barbados	x	
SAM	South America	AW	Aruba (nl)	x	
SAM	South America	SV	El salvador	x	
SAM	South America	BO	Bolivia	x	
SAM	South America	BR	Brazil	x	
SAM	South America	GT	Guatemala	x	
SAM	South America	CL	Chile	x	
SAM	South America	CO	Colombia	x	

Code	Name	Code	Country	Standard	Assure
SAM	South America	PA	Panama	x	
SAM	South America	EC	Ecuador	x	
SAM	South America	PE	Peru	x	
SAM	South America	UY	Uruguay	x	
SAM	South America	VE	Venezuela	x	
IMA	India, Middle East & Africa	AO	Angola	x	
IMA	India, Middle East & Africa	BD	Bangladesh	x	
IMA	India, Middle East & Africa	BH	Bahrain	x	
IMA	India, Middle East & Africa	BW	Botswana	x	
IMA	India, Middle East & Africa	CM	Cameroon	x	
IMA	India, Middle East & Africa	CD	Congo	x	
IMA	India, Middle East & Africa	CI	Cote d'ivoire	x	
IMA	India, Middle East & Africa	EG	Egypt	x	
IMA	India, Middle East & Africa	ET	Ethiopia	x	
IMA	India, Middle East & Africa	GM	Gambia	x	
IMA	India, Middle East & Africa	GH	Ghana	x	
IMA	India, Middle East & Africa	IN	India	x	
IMA	India, Middle East & Africa	IR	Iran	x	
IMA	India, Middle East & Africa	IQ	Iraq	x	
IMA	India, Middle East & Africa	JO	Jordan	x	
IMA	India, Middle East & Africa	KE	Kenya	x	
IMA	India, Middle East & Africa	KW	Kuwait	x	
IMA	India, Middle East & Africa	LB	Lebanon	x	
IMA	India, Middle East & Africa	MU	Mauritius	x	
IMA	India, Middle East & Africa	NA	Namibia	x	
IMA	India, Middle East & Africa	NG	Nigeria	x	
IMA	India, Middle East & Africa	OM	Oman	x	
IMA	India, Middle East & Africa	PK	Pakistan	x	
IMA	India, Middle East & Africa	QA	Qatar	x	
IMA	India, Middle East & Africa	SA	Saudi arabia	x	
IMA	India, Middle East & Africa	SN	Senegal	x	
IMA	India, Middle East & Africa	ZA	South africa	x	
IMA	India, Middle East & Africa	TZ	Tanzania	x	
IMA	India, Middle East & Africa	UG	Uganda	x	
IMA	India, Middle East & Africa	AE	United arab emirates	x	
IMA	India, Middle East & Africa	ZM	Zambia	x	
IMA	India, Middle East & Africa	ZW	Zimbabwe	x	
NAS	North Asia	CN	China	x	
NAS	North Asia	JP	Japan	x	
NAS	North Asia	KR	Korea	x	
NAS	North Asia	TW	Taiwan	x	
SAS	South Asia	AU	Australia		X
SAS	South Asia	GU	Guam	x	
SAS	South Asia	ID	Indonesia	x	
SAS	South Asia	MY	Malaysia	x	
SAS	South Asia	NC	New caledonia	x	
SAS	South Asia	NZ	New zealand	x	
SAS	South Asia	PG	Papua new guinea	x	
SAS	South Asia	PH	Philippines	x	
SAS	South Asia	SG	Singapore	x	
SAS	South Asia	TH	Thailand	x	
SAS	South Asia	VN	Vietnam	x	