

# PV Lightning Protection Box LQX-A Series



LQX1/1DC500VBS



LQX1/1DC1000VQS

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## DC500V~1200V 16~125A input1~5 output1~5

CNLOQ's PV Lightning Protection box features a 1~5in (1~5 PV strings) 1~5out (1~5 inverter strings) design. Equipped with a rugged IP65-rated enclosure, it integrates circuit breakers(16~125A) or disconnect switch(32, 63A), and surge protection devices to provide comprehensive protection for solar PV systems rated below 500V/600V/1000V. This equipment performs critical circuit aggregation and disconnect functions, effectively resisting overloads, short circuits, and lightning surge impacts



IP65 outdoor  
waterproof and sun  
resistant  
UV-resistant



Short-circuit protection,  
overload protection,  
lightning protection,  
isolation circuit



PC+ABS housing,  
IK10 impact resistance,  
flame retardant,  
corrosion resistant



OEM/ODM Free  
Customization  
for PV Products

LQX1/1

CE  RoHS IEC IP65

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# Lightning Protection Box

## DC 500/600V 1 in 1 out



LQX1/1DC500VBS



LQX1/1DC600VLS



IP65 outdoor waterproof and sun resistant UV-resistant



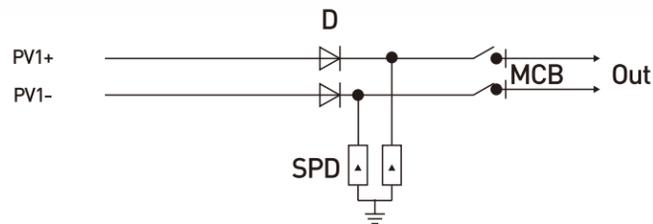
Short-circuit protection, overload protection, lightning protection, Isolation circuit



PC+ABS housing, IK10 impact resistance, flame retardant, corrosion resistant

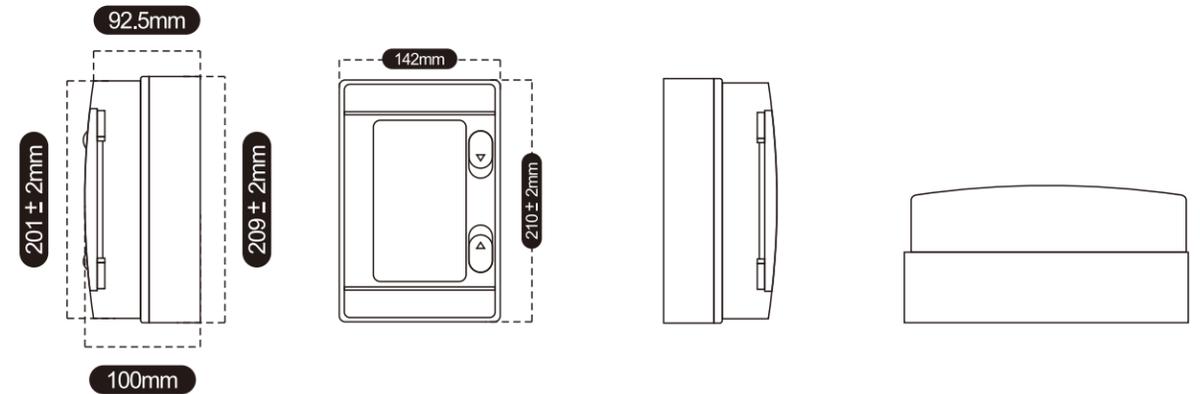


OEM/ODM Free Customization for PV Products



MCB: Miniature Circuit Breaker  
SPD: Surge Protection Device  
D: Anti-reflection diode (optional)

### Product Dimension Drawing (mm)



Technical data		
Model	LQX1/1DC500VBS	LQX1/1DC600VLS
String	1 in 1 out	
Rated Voltage Ue (V)	DC 500	DC 600
Rated current In(A)	16~125	16~63
Quality Certificate	CE, ISO9001, RoHS, Ip65	
Protection Level	IP65	
Impact Level	IK10	
Box Material	PC+ABS	
Operating Temperature	-25 °C ~ +60°C	
Humidity	≤95%	
Connector	MC4 or PG	
Installation	Wall Mounting	
Altitude	2000m	
Dimension (without mounting connector)	210*142*100(16~63A), 210*215*100(80~125A)	

	MCB	SPD	
Rated Voltage Ue (V)	DC500/600	Rated Voltage Ue (V)	DC500/600
Ui (V)	DC1000/1200	In (8/20)us (kA)	20
Rated Current In(A)	16/20/25/32/40/50/63/80/100/125	I <sub>max</sub> (8/20)us (kA)	40
Icu (kA)	6	Protection Level (kV)	2.2
standard	IEC 60947-2	standard	IEC 61643-31

LQX2/2

CE  RoHS IEC IP65

**CN**LONGQ.com

# Lightning Protection Box

## DC 500/600V 2 in 2 out



LQX2/2DC500VBS

LQX2/2DC600VLS



IP65 outdoor waterproof and sun resistant UV-resistant



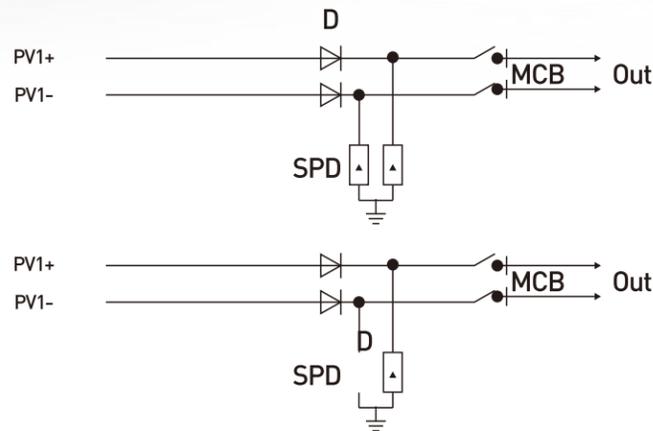
Short-circuit protection, overload protection, lightning protection, Isolation circuit



PC+ABS housing, IK10 impact resistance, flame retardant, corrosion resistant

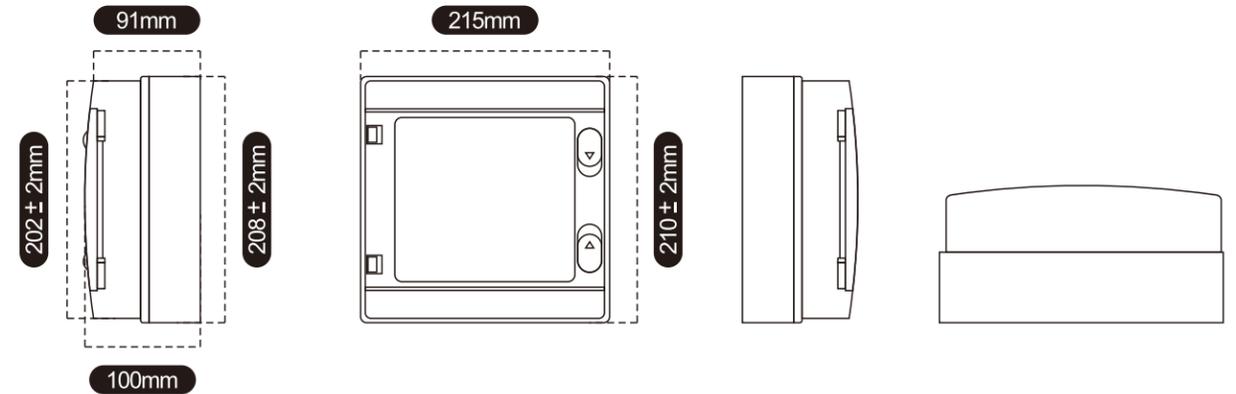


OEM/ODM Free Customization for PV Products



MCB: Miniature Circuit Breaker  
SPD: Surge Protection Device  
D: Anti-reflection diode (optional)

### Product Dimension Drawing (mm)



Technical data		
Model	LQX2/2DC500VBS	LQX2/2DC600VLS
String	2 in 2 out	
Rated Voltage Ue (V)	DC 500	DC 600
Rated current In(A)	16~125	16~63
Quality Certificate	CE, ISO9001, RoHS, Ip65	
Protection Level	IP65	
Impact Level	IK10	
Box Material	PC+ABS	
Operating Temperature	-25 °C ~ +60°C	
Humidity	≤95%	
Connector	MC4 or PG	
Installation	Wall Mounting	
Altitude	2000m	
Dimension (without mounting connector)	210*215*100(16~63A), 258*298*125(80~125A)	

	MCB	SPD	
Rated Voltage Ue (V)	DC500/600	Rated Voltage Ue (V)	DC500/600
Ui (V)	DC1000/1200	In (8/20)us (kA)	20
Rated Current In(A)	16/20/25/32/40/50/63/80/100/125	I <sub>max</sub> (8/20)us (kA)	40
Icu (kA)	6	Protection Level (kV)	2.2
standard	IEC 60947-2	standard	IEC 61643-31

LQX3/3

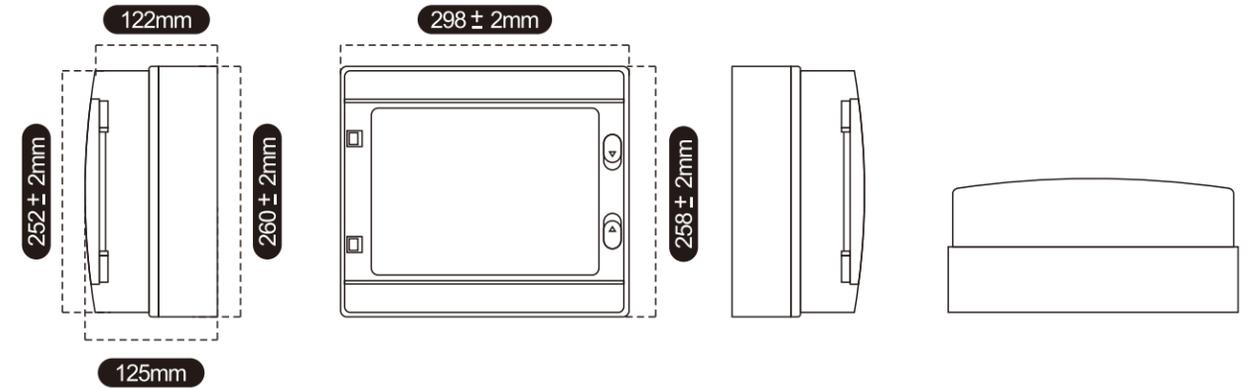
CE ISO 9001 COMPASS ROHS IEC IP65

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# Lightning Protection Box

## DC 500/600V 3 in 3 out

### Product Dimension Drawing (mm)



LQX3/3DC500VBS

LQX3/3DC600VLS



IP65 outdoor waterproof and sun resistant UV-resistant



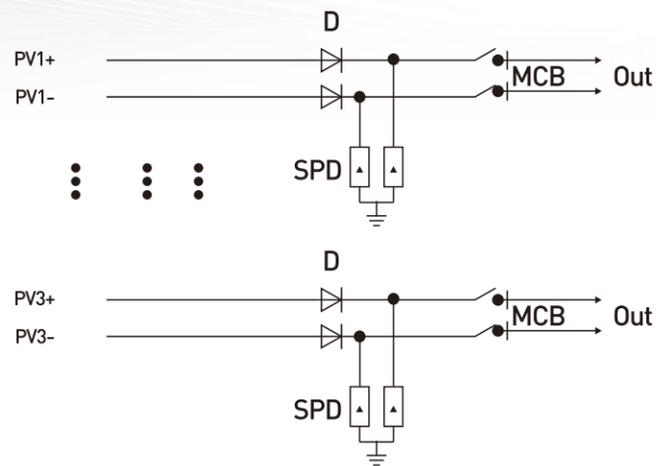
Short-circuit protection, overload protection, lightning protection, Isolation circuit



PC+ABS housing, IK10 impact resistance, flame retardant, corrosion resistant



OEM/ODM Free Customization for PV Products



MCB: Miniature Circuit Breaker  
SPD: Surge Protection Device  
D: Anti-reflection diode (optional)

#### Technical data

Model	LQX3/3DC500VBS	LQX3/3DC600VLS
String	3 in 3 out	
Rated Voltage Ue (V)	DC 500	DC 600
Rated current In(A)	16~125	16~63
Quality Certificate	CE, ISO9001, RoHS, Ip65	
Protection Level	IP65	
Impact Level	IK10	
Box Material	PC+ABS	
Operating Temperature	-25 °C ~ +60°C	
Humidity	≤95%	
Connector	MC4 or PG	
Installation	Wall Mounting	
Altitude	2000m	
Dimension (without mounting connector)	258*298*125(16~63A), 285*410*130(80~125A)	

#### MCB

#### SPD

	MCB	SPD
Rated Voltage Ue (V)	DC500/600	Rated Voltage Ue (V) DC500/600
Ui (V)	DC1000/1200	In (8/20)us (kA) 20
Rated Current In(A)	16/20/25/32/40/50/63/80/100/125	I <sub>max</sub> (8/20)us (kA) 40
Icu (kA)	6	Protection Level (kV) 2.2
standard	IEC 60947-2	standard IEC 61643-31

LQX4/4

CE ISO 9001 RoHS IEC IP65

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# Lightning Protection Box

## DC 500/600V 4 in 4 out



LQX4/4DC500VBS

LQX4/4DC600VLS



IP65 outdoor waterproof and sun resistant UV-resistant



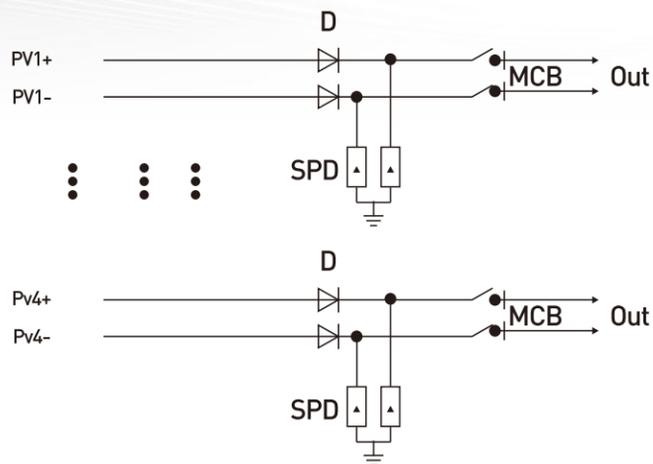
Short-circuit protection, overload protection, lightning protection, Isolation circuit



PC+ABS housing, IK10 impact resistance, flame retardant, corrosion resistant

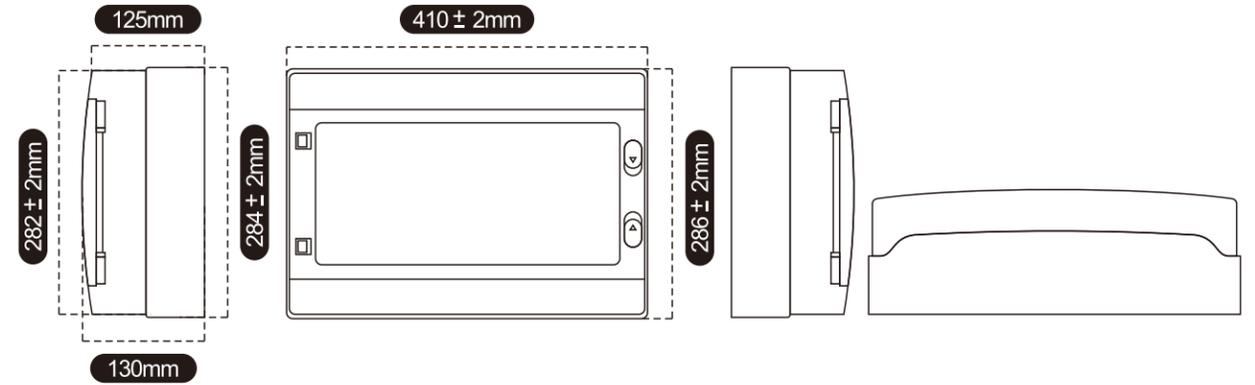


OEM/ODM Free Customization for PV Products



MCB: Miniature Circuit Breaker  
SPD: Surge Protection Device  
D: Anti-reflection diode (optional)

### Product Dimension Drawing (mm)



Technical data		
Model	LQX4/4DC500VBS	LQX4/4DC600VLS
String	4 in 4 out	
Rated Voltage Ue (V)	DC 500	DC 600
Rated current In(A)	16~125	16~63
Quality Certificate	CE, ISO9001, RoHS, Ip65	
Protection Level	IP65	
Impact Level	IK10	
Box Material	PC+ABS	
Operating Temperature	-25 °C ~ +60°C	
Humidity	≤95%	
Connector	MC4 or PG	
Installation	Wall Mounting	
Altitude	2000m	
Dimension (without mounting connector)	285*410*130(16~63A), 422*298*135(80~125A)	

	MCB	SPD	
Rated Voltage Ue (V)	DC500/600	Rated Voltage Ue (V)	DC500/600
Ui (V)	DC1000/1200	In (8/20)us (kA)	20
Rated Current In(A)	16/20/25/32/40/50/63/80/100/125	I <sub>max</sub> (8/20)us (kA)	40
Icu (kA)	6	Protection Level (kV)	2.2
standard	IEC 60947-2	standard	IEC 61643-31

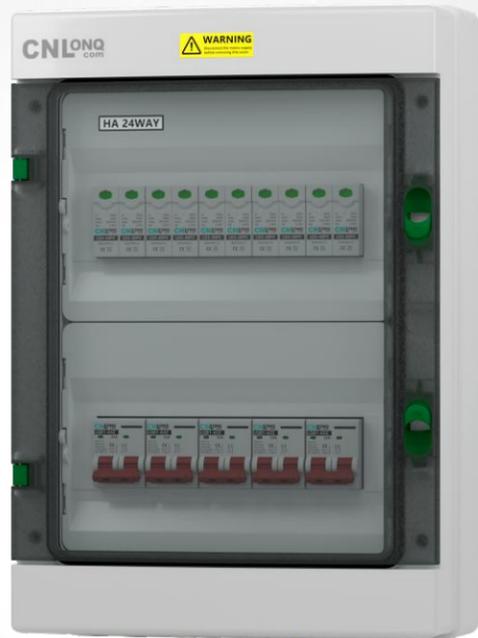
LQX5/5

CE ISO 9001 ROHS IEC IP65

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# Lightning Protection Box

## DC 500/600V 5 in 5 out



LQX5/5DC500VBS



LQX5/5DC600VLS



IP65 outdoor waterproof and sun resistant UV-resistant



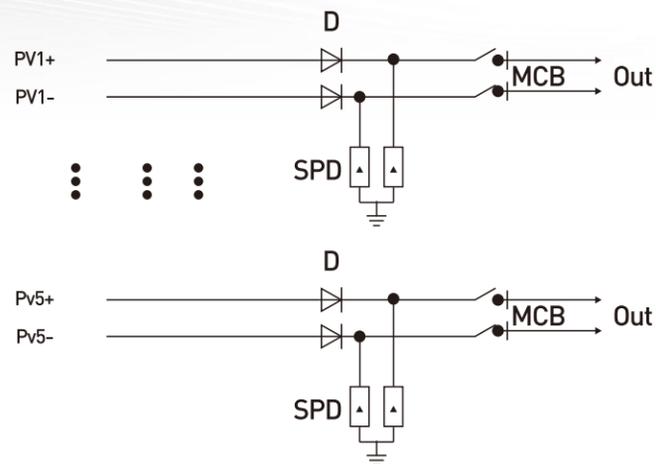
Short-circuit protection, overload protection, lightning protection, Isolation circuit



PC+ABS housing, IK10 impact resistance, flame retardant, corrosion resistant

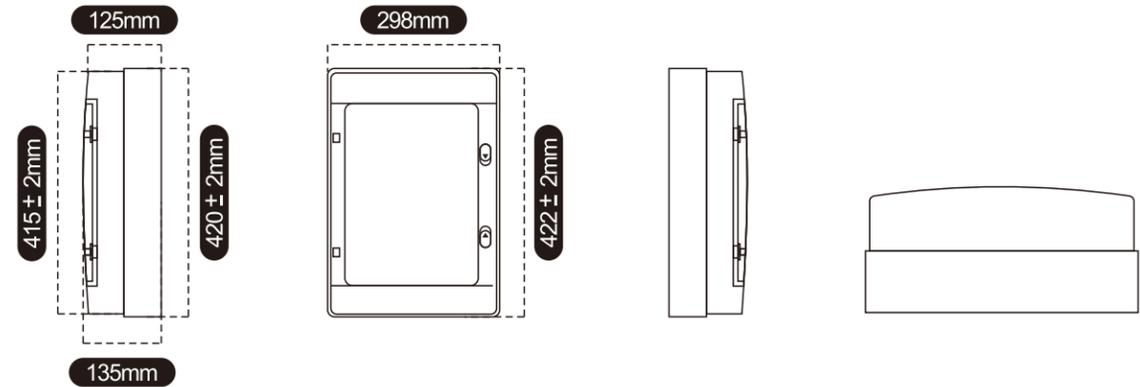


OEM/ODM Free Customization for PV Products



MCB: Miniature Circuit Breaker  
SPD: Surge Protection Device  
D: Anti-reflection diode (optional)

### Product Dimension Drawing (mm)



Technical data		
Model	LQX5/5DC500VBS	LQX5/5DC600VLS
String	5 in 5 out	
Rated Voltage Ue (V)	DC 500	DC 600
Rated current In(A)	16~63	16~63
Quality Certificate	CE, ISO9001, RoHS, IP65	
Protection Level	IP65	
Impact Level	IK10	
Box Material	PC+ABS	
Operating Temperature	-25 °C ~ +60°C	
Humidity	≤95%	
Connector	MC4 or PG	
Installation	Wall Mounting	
Altitude	2000m	
Dimension (without mounting connector)	422*298*135	

	MCB	SPD	
Rated Voltage Ue (V)	DC500/600	Rated Voltage Ue (V)	DC500/600
Ui (V)	DC1000/1200	In (8/20)us (kA)	20
Rated Current In(A)	16/20/25/32/40/50/63	I <sub>max</sub> (8/20)us (kA)	40
Icu (kA)	6	Protection Level (kV)	2.2
standard	IEC 60947-2	standard	IEC 61643-31

LQX1/1

TUV Rheinland CE ISO 9001 RoHS IEC UK CA CB IP65

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# Lightning Protection Box

## DC 1000V 1 in 1 out



LQX1/1DC1000VQS

LQX1/1DC1000VBS



IP65 outdoor waterproof and sun resistant UV-resistant



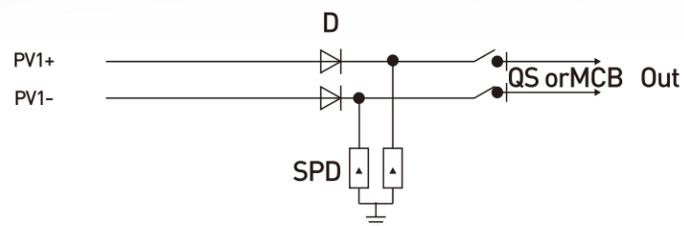
Short-circuit protection, overload protection, lightning protection, Isolation circuit



PC+ABS housing, IK10 impact resistance, flame retardant, corrosion resistant

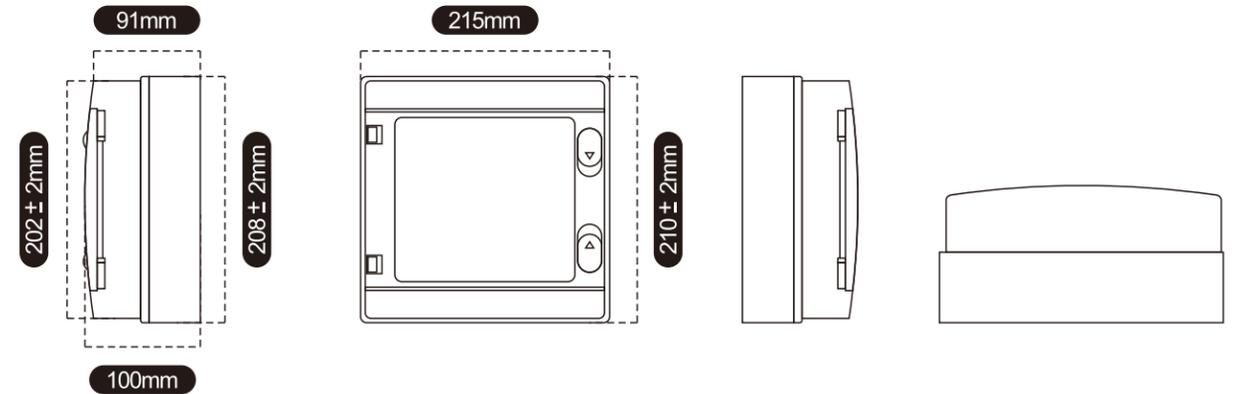


OEM/ODM Free Customization for PV Products



QS: Switch-Disconnect Isolator  
 MCB: Miniature Circuit Breaker  
 SPD: Surge Protection Device  
 D: Anti-reflection diode (optional)

### Product Dimension Drawing (mm)



Technical data		
Model	LQX1/1DC1000VQS	LQX1/1DC1000VBS
String	1 in 1 out	
Rated Voltage Ue (V)	DC 1000	DC1000
Rated current In(A)	32/63	16~125
Quality Certificate	TUV, CE, CB, UKCA, CCC, ISO, IP65, RoHS, IEC	
Protection Level	IP65	
Impact Level	IK10	
Box Material	PC+ABS	
Operating Temperature	-25 °C ~ +60°C	
Humidity	≤95%	
Connector	MC4 or PG	
Installation	Wall Mounting	
Altitude	2000m	
Dimension (without mounting connector)	210*215*100	

	QS	or	MCB	and	SPD
Rated Voltage Ue (V)	DC1000	Rated Voltage Ue (V)	DC1000	Rated Voltage Ue (V)	DC500/600
Ui (V)	DC1500	Ui (V)	DC1000	In (8/20)us (kA)	20
Rated Current In(A)	32, 63	Rated Current In(A)	16~125	I <sub>max</sub> (8/20)us (kA)	40
Uimp(kV)	8	Icu (kA)	6	Protection Level (kV)	2.2
standard	IEC 60947-3	standard	IEC 60947-2	standard	IEC 61643-31

LQX2/2

TUV Rheinland CE ISO 9001 RoHS IEC UK CA CB IP65

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# Lightning Protection Box

## DC 1000V 2 in 2 out



LQX2/2DC1000VQS



LQX2/2DC1000VBS



IP65 outdoor waterproof and sun resistant UV-resistant



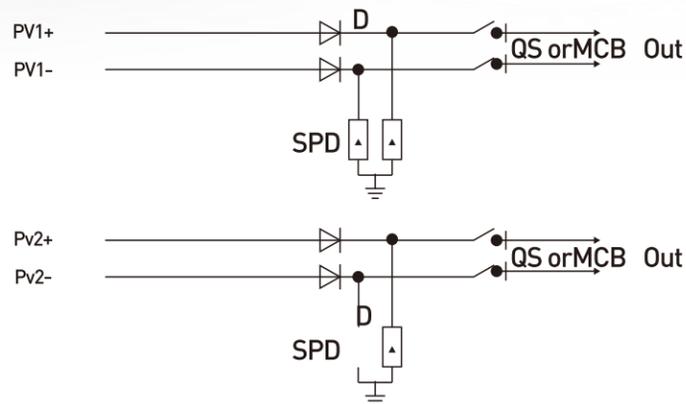
Short-circuit protection, overload protection, lightning protection, Isolation circuit



PC+ABS housing, IK10 impact resistance, flame retardant, corrosion resistant

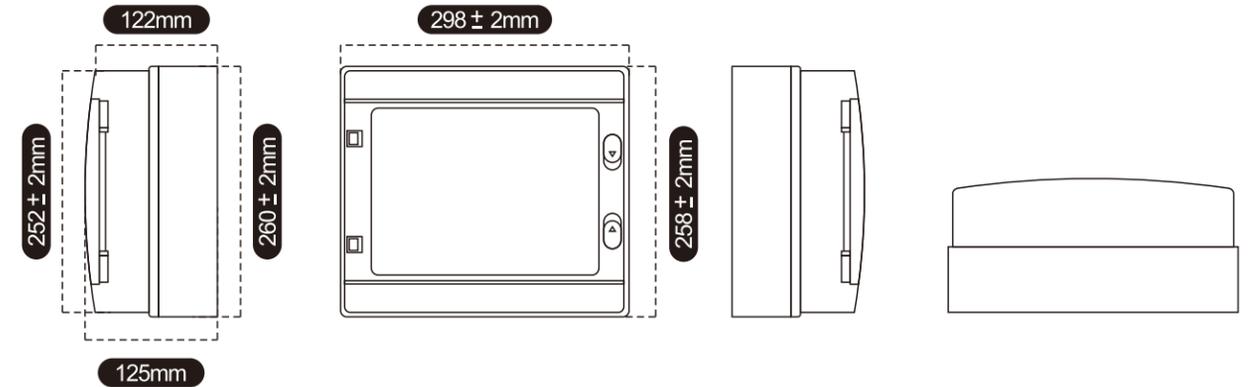


OEM/ODM Free Customization for PV Products



QS: Switch-Disconnect Isolator  
 MCB: Miniature Circuit Breaker  
 SPD: Surge Protection Device  
 D: Anti-reflection diode (optional)

### Product Dimension Drawing (mm)



Technical data		
Model	LQX2/2DC1000VQS	LQX2/2DC1000VBS
String	2 in 2 out	
Rated Voltage Ue (V)	DC 1000	DC1000
Rated current In(A)	32/63	16~125
Quality Certificate	TUV, CE, CB, UKCA, CCC, ISO, IP65, RoHS, IEC	
Protection Level	IP65	
Impact Level	IK10	
Box Material	PC+ABS	
Operating Temperature	-25 °C ~ +60°C	
Humidity	≤95%	
Connector	MC4 or PG	
Installation	Wall Mounting	
Altitude	2000m	
Dimension (without mounting connector)	258*298*125(16~63A), 285*410*130(80~125A)	

	QS	or	MCB	and	SPD
Rated Voltage Ue (V)	DC1000	Rated Voltage Ue (V)	DC1000	Rated Voltage Ue (V)	DC500/600
Ui (V)	DC1500	Ui (V)	DC1000	In (8/20)us (kA)	20
Rated Current In(A)	32, 63	Rated Current In(A)	16~125	I <sub>max</sub> (8/20)us (kA)	40
Uimp(kV)	8	Icu (kA)	6	Protection Level (kV)	2.2
standard	IEC 60947-3	standard	IEC 60947-2	standard	IEC 61643-31

LQX3/3

TUV Rheinland CE ISO 9001 RoHS IEC UK CA CB IP65

CNLONG.com

# Lightning Protection Box

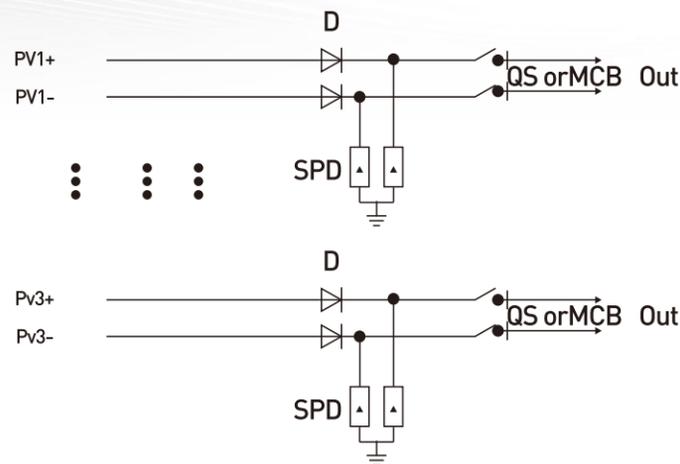
## DC 1000V 3 in 3 out



LQX3/3DC1000VQS

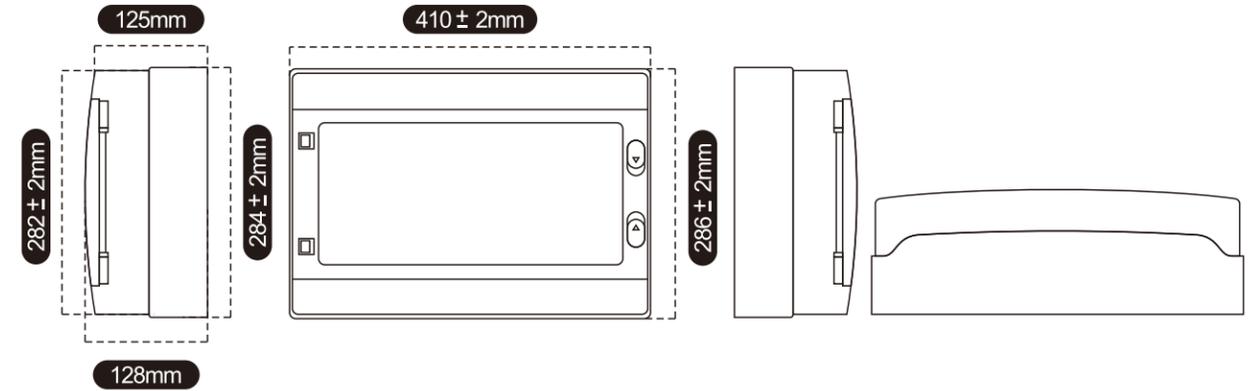
LQX3/3DC1000VBS

- IP65 outdoor waterproof and sun resistant UV-resistant
- Short-circuit protection, overload protection, lightning protection, Isolation circuit
- PC+ABS housing, IK10 impact resistance, flame retardant, corrosion resistant
- OEM/ODM Free Customization for PV Products



QS: Switch-Disconnect Isolator  
 MCB: Miniature Circuit Breaker  
 SPD: Surge Protection Device  
 D: Anti-reflection diode (optional)

### Product Dimension Drawing (mm)



Technical data		
Model	LQX3/3DC1000VQS	LQX3/3DC1000VBS
String	3 in 3 out	
Rated Voltage Ue (V)	DC 1000	DC1000
Rated current In(A)	32/63	16~125
Quality Certificate	TUV, CE, CB, UKCA, CCC, ISO, IP65, RoHS, IEC	
Protection Level	IP65	
Impact Level	IK10	
Box Material	PC+ABS	
Operating Temperature	-25 °C ~ +60°C	
Humidity	≤95%	
Connector	MC4 or PG	
Installation	Wall Mounting	
Altitude	2000m	
Dimension (without mounting connector)	285*410*130(16~63A), 422*298*135(80~125A)	

	QS	or	MCB	and	SPD
Rated Voltage Ue (V)	DC1000	Rated Voltage Ue (V)	DC1000	Rated Voltage Ue (V)	DC500/600
Ui (V)	DC1500	Ui (V)	DC1000	In (8/20)us (kA)	20
Rated Current In(A)	32, 63	Rated Current In(A)	16~125	I <sub>max</sub> (8/20)us (kA)	40
Uimp(kV)	8	Icu (kA)	6	Protection Level (kV)	2.2
standard	IEC 60947-3	standard	IEC 60947-2	standard	IEC 61643-31

LQX4/4

TUV Rheinland CE ISO 9001 RoHS IEC UK CA CB IP65

CNLONGQ.com

# Lightning Protection Box

## DC 1000V 4 in 4 out



LQX4/4DC1000VQS



LQX4/4DC1000VBS



IP65 outdoor waterproof and sun resistant UV-resistant



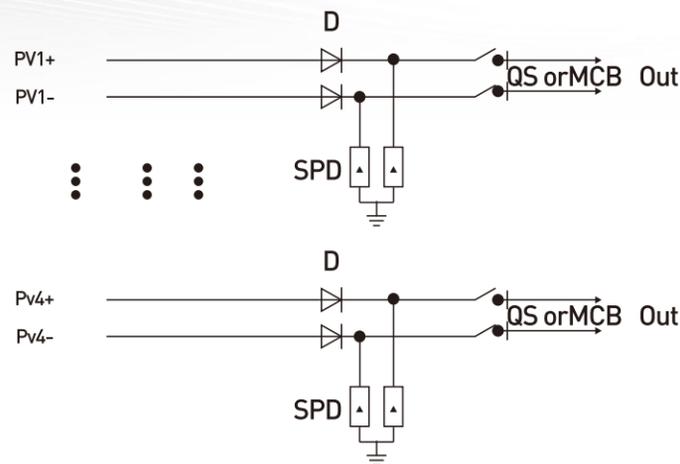
Short-circuit protection, overload protection, lightning protection, Isolation circuit



PC+ABS housing, IK10 impact resistance, flame retardant, corrosion resistant

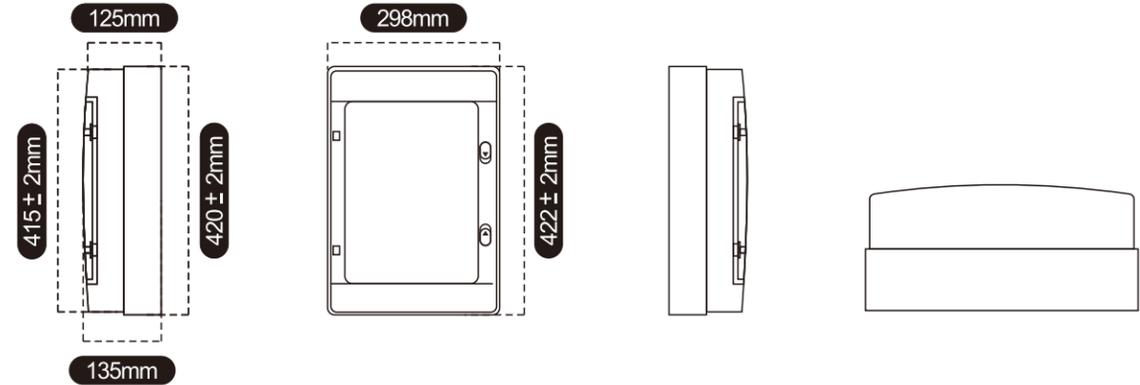


OEM/ODM Free Customization for PV Products



QS: Switch-Disconnect Isolator  
 MCB: Miniature Circuit Breaker  
 SPD: Surge Protection Device  
 D: Anti-reflection diode (optional)

### Product Dimension Drawing (mm)



Technical data		
Model	LQX4/4DC1000VQS	LQX4/4DC1000VBS
String	4 in 4 out	
Rated Voltage Ue (V)	DC 1000	DC1000
Rated current In(A)	32/63	16~63
Quality Certificate	TUV, CE, CB, UKCA, CCC, ISO, IP65, RoHS, IEC	
Protection Level	IP65	
Impact Level	IK10	
Box Material	PC+ABS	
Operating Temperature	-25 °C ~ +60°C	
Humidity	≤95%	
Connector	MC4 or PG	
Installation	Wall Mounting	
Altitude	2000m	
Dimension (without mounting connector)	422*298*135	

	QS	or	MCB	and	SPD
Rated Voltage Ue (V)	DC1000	Rated Voltage Ue (V)	DC1000	Rated Voltage Ue (V)	DC500/600
Ui (V)	DC1500	Ui (V)	DC1000	In (8/20)us (kA)	20
Rated Current In(A)	32, 63	Rated Current In(A)	16~63	I <sub>max</sub> (8/20)us (kA)	40
Uimp(kV)	8	Icu (kA)	6	Protection Level (kV)	2.2
standard	IEC 60947-3	standard	IEC 60947-2	standard	IEC 61643-31