

MERLIN DC-DC CONVERTERS

Merlin DC to DC Converters offer a sophisticated solution for seamless transitions between voltage levels. Our versatile product lineup includes models with input selections of 12V, 24V, or 48V, and output options of 12V or 24V, catering to a wide array of power requirements. Powered by state-of-the-art switch mode technology, our converters deliver exceptional efficiency and minimal power loss, ensuring precise and reliable performance. Our DC to DC converter lineup consists of three different series, TDC, TDCi and TDCi-CH. Discover the specific differences between each series below.

The TDC series are compact non isolated DC to DC converters and have an excellent price/performance ratio. These are available in Step Down and Step Up versions and can be used in applications where the DC input source share the same ground potential as the DC output load, like in most road vehicles.

The TDCi series are isolated DC to DC converters that are also available in Step Down and Step Up versions. These models are ideal when no electrical connection between the input source and the output load is desired.

The TDCi-CH series are based on the standard TDCi products, but are equipped with an automatic battery charging functionality. This enables the possibility to charge a battery connected to the output from another battery connected to the input. One of the benefits is that the charging voltage of the input battery does not need to be exactly the same as the charge voltage requirements of the output battery, allowing two different battery types to be connected together.

- **Dual supply** with the ability to supply 12V consumers from a 24 system or vice versa.
- **Suitable for 48V** with the ability to supply 12V or 24V consumers from a 48V system.
- **Expert design** that is both compact and robust.
- **Advanced protection** against low battery voltage, high temperature, and overload.
- **Versatile product lineup** with a wide variety of input and output options.



PART#	IN/OUT ISOLATION (500V)	CHARGE FUNCTIONALITY	VIN RANGE (VDC)	VOUT (VDC)	IOUT (A)	COOLING	DIMENSIONS (MM)	WEIGHT (KG)
30-7000	NO	NO	9...18	25.0	10	CONVECTION	127 x 88 x 49	0.36
30-7001	NO	NO	9...18	25.0	20	CONVECTION	150 x 88 x 98	1.20
30-7002	NO	NO	20...35	13.6	12	CONVECTION	98 x 88 x 49	0.30
30-7003	NO	NO	20...35	13.6	20	CONVECTION	127 x 88 x 49	0.45
30-7004	NO	NO	20...35	13.6	30	FAN	150 x 88 x 49	0.53
30-7010	YES	NO	9...18	12.5	16	FAN	175 x 88 x 49	0.62
30-7011	YES	NO	20...35	12.5	16	FAN	175 x 88 x 49	0.62
30-7012	YES	NO	30...60	12.5	16	FAN	175 x 88 x 49	0.62
30-7013	YES	NO	9...18	24.5	8	FAN	175 x 88 x 49	0.62
30-7014	YES	NO	20...35	24.5	8	FAN	175 x 88 x 49	0.62
30-7015	YES	NO	30...60	24.5	8	FAN	175 x 88 x 49	0.62
30-7020	YES	NO	9...18	12.5	30	FAN	190 x 132 x 83	1.36
30-7021	YES	NO	20...35	12.5	30	FAN	190 x 132 x 83	1.36
30-7022	YES	NO	30...60	12.5	30	FAN	190 x 132 x 83	1.36
30-7023	YES	NO	9...18	24.5	15	FAN	190 x 132 x 83	1.36
30-7024	YES	NO	20...35	24.5	15	FAN	190 x 132 x 83	1.36
30-7025	YES	NO	30...60	24.5	15	FAN	190 x 132 x 83	1.36
30-7030	YES	YES	9...18	14.4	20	CONVECTION	190 x 132 x 83	1.31
30-7031	YES	YES	9...18	28.8	10	CONVECTION	190 x 132 x 83	1.31

NOTE: THE GIVEN SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.