**Features**

- **Global certificates**
- Universal AC input / Full range
- 3 pole AC inlet IEC320-C14, Class I power unit
- Built-in active PFC function
- No load power consumption < 0.15W
- **Energy efficiency Level VI**
- Comply with EISA 2007/DoE, NRCan, Korea K-MEPS, AU/NZ MEPS, EU ErP and CoC Version 5
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Fully enclosed plastic case
- -30°C to +70°C wide range working temperature
- LED indicator for power on

**Description**

GST120A is a highly reliable, 120W desktop style single-output green adaptor series. This product is a class I power unit (with FG), equipped with a standard IEC320-C14 AC inlet and adopting the input range from 85VAC to 264VAC.

With the efficiency up to 90.5% and the extremely low no-load power consumption below 0.15W, GST120A is compliant with USA EISA 2007/DoE, Canada NRCan, Australia and New Zealand MEPS, Korea K-MEPS, EU ErP and Code of Conduct (CoC) Version 5. The supreme feature allows the adaptor to save the energy when it is either under the operating mode or the standby mode. The entire series utilizes the 94V-0 flame retardant plastic case. GST120A is certified for the international safety regulations.

**Model Encoding**

GST 120A [24] - CIN

Output voltage
IEC320-C14 AC inlet
Rated wattage
Series name
120W AC-DC High Reliability Industrial Adaptor

**GST120A24-CIN**

### SPECIFICATION

#### OUTPUT

- **SAFETY MODEL NO.**: GST120A24
- **DC VOLTAGE**: 24V
- **RATED CURRENT**: 5A
- **CURRENT RANGE**: 0 – 5A
- **RATED POWER (max.)**: 120W
- **ripple & noise (max.)**: 180mVp-p
- **VOLTAGE TOLERANCE**: ±3.0%
- **LINE REGULATION**: ±1.0%
- **LOAD REGULATION**: ±3.0%
- **setup, rise time**: 2000ms, 30ms / 230VAC, 2500ms, 30ms / 115VAC at full load
- **Hold up time (Typ.)**: 20ms / 230VAC, 20ms / 115VAC at full load

#### INPUT

- **VOLTAGE RANGE**: 85 ~ 264VAC, 120 ~ 370VDC
- **FREQUENCY RANGE**: 47 ~ 63Hz
- **POWER FACTOR**: PF>0.93 / 230VAC, PF>0.97 / 115VAC at full load
- **EFFICIENCY**: 90.5%
- **AC CURRENT**: 1.4A / 115VAC, 0.7A / 230VAC
- **INRUSH CURRENT**: Cold start: 35 / 115AC, 70A / 230VAC
- **LEAKAGE CURRENT**: 0.75mA / 240VAC

#### PROTECTION

- **OVERLOAD**: 105 ~ 160% rated output power
- **Protection type**: Hiccup mode, recovers automatically after fault condition is removed
- **OVER VOLTAGE**: 105 ~ 135% rated output voltage
- **Protection type**: Shut down o/p voltage, re-power on to recover
- **OVER TEMPERATURE**: Shut down o/p voltage, re-power on to recover

#### ENVIRONMENT

- **WORKING TEMP.**: -30 ~ +70°C (Refer to “Derating Curve”)
- **WORKING HUMIDITY**: 20% ~ 90% RH non-condensing
- **STORAGE TEMP. & HUMIDITY**: -40 ~ +85°C, 10 ~ 95% RH non-condensing
- **TEMP. COEFFICIENT**: ±0.03%/°C (0~65°C)
- **VIBRATION**: 10 ~ 500Hz, 2G 10min/1cycle, period for 60min, each angle X, Y, Z axes

#### SAFETY & EMC (Note. 8)

- **SAFETY STANDARDS**: Note. 7
  - UL60950-1, CSA C22.2, TUV EN60950-1, BSMI CNS14336, CCC GB4943, PSE J60950-1, AS/NZS 60950.1, BIS IS13252, KC K60950-1, EAC TP TC 004 approved, SIRIM MS IEC60950-1 (optional) approved
- **WITHSTAND VOLTAGE**: UP-O/P: 3KVAC
- **ISOLATION RESISTANCE**: UP-O/P: 100M Ohms / 500VDC / 25°C / 70% RH

#### EMC EMISSION

- **Conducted emission**: EN55032/ CISPR32, FCC PART 15 / CISPR22, CAN ICES-3(B), NMB-3(B), CNS13438, GB17625.1, EAC TP TC 020, MSIP KN32
- **Radiated emission**: EN55032/ CISPR32, FCC PART 15 / CISPR22, CAN ICES-3(B), NMB-3(B), CNS13438, GB17625.1, EAC TP TC 020, MSIP KN32
- **Harmonic current**: EN61000-3-2, GB8254
- **Voltage flicker**: EN61000-3-3

#### EMC IMMUNITY

- **ESD**: EN61000-4-2
- **RF field susceptibility**: EN61000-4-3
- **EFT bursts**: EN61000-4-4
- **Surge susceptibility**: EN61000-4-5
- **Conducted susceptibility**: EN61000-4-6
- **Magnetic field immunity**: EN61000-4-8

#### OTHERS

- **MTBF**: 368.75K hrs min. MIL-HDBK-217F(25°C)
- **DIMENSION**: 167*67*35mm (L*W*H)
- **PACKING**: 0.62Kg; 20pcs / 13.4Kg / 0.9CUFT

#### PLUG & CABLE

- **See page 3**

#### NOTE

1. All parameters are specified at 230VAC input, rated load, 25°C, 70% RH ambient.
2. Ripple & noise are measured at 20MHz by using a 12” twisted pair terminated with a 0.1/ & 47/Ω capacitor.
3. Tolerance: includes set up tolerance, line regulation, load regulation.
4. Line regulation is measured from low line to high line at rated load.
5. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.
6. Derating may be needed under low input voltage. Please check the derating curve for more details.
7. The demand for Malaysia safety is processed with the order no. GST120A / SIRIM by request. Please contact MEAN WELL for details.
8. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests, please refer to “EMI testing of component power supplies.” (as available on http://www.meanwell.com)
## Derating Curve

![Derating Curve Image]

## Static Characteristics

![Static Characteristics Image]

## Mechanical Specification

![Mechanical Specification Image]

## DC output plug

<table>
<thead>
<tr>
<th>P/N</th>
<th>OUTPUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIN1</td>
<td>+ (Red)</td>
</tr>
<tr>
<td>PIN3</td>
<td>- (Black)</td>
</tr>
</tbody>
</table>

## Installation Manual


**GST120A24-CIN**

120W AC-DC High Reliability Industrial Adaptor

File Name: GST120A-SPEC  2018-01-18

COMP-MALL GmbH  -  www.comp-mall.de