



Certificate of Conformity

Certificate num.	Registration date	Version	Valid until	
afp - 2447	17-Sep-2010	Number 10	Issue date 27-Apr-2019	30-Apr-2020

Page 1 of 4

Product designation

ROMTECK, Model RM2118 GPRS-PSTN-ASE-F, alarm signalling equipment

(Refer to the Schedule/enclosures for further specified details)

Agent/distributor

ROMTECK
37 Collingwood Street, OSBORNE PARK, WA, AUSTRALIA, 6017

Registrant

ROMTECK
37 Collingwood Street, OSBORNE PARK, WA, AUSTRALIA, 6017

Producer

ROMTECK
37 Collingwood Street, OSBORNE PARK, WA, AUSTRALIA, 6017

Conformance criteria and evaluation

The ROMTECK, Model RM2118 GPRS-PSTN-ASE-F, alarm signalling equipment has been evaluated and verified as conforming with the relevant requirements of the following criteria.

1. Australian Standard AS 4428.6-1997, 'Fire detection, warning, control and intercom systems - Control and indicating equipment - Alarm signalling equipment'.

Limitations/conditions of conformance

Limitations/conditions of conformance, where identified on this certificate, are derived from qualifications from evaluation(s) for conformity and/or other related technical documentation. All details with respect to design, assembly and installation instructions and restrictions should be checked against the producer's current technical manual/data sheets and the requirements of the Authority having Jurisdiction.

Specified limitations/conditions, determined from the evaluation for conformity, include the following.

- i. Compatibility of this equipment with new or existing actuating devices should be verified prior to installation.
- ii. The product must be mounted within c.i.e. or adjacent to the c.i.e. with interconnections not leaving protected enclosures;
- iii. The product is to be connected to a compatible control station.
- iv. Evaluation for conformity does not include assessment of the HSDPA / remote IP alarm signalling equipment as mentioned in "Operation and installation manual".

This certification is issued within the scope of CSIRO Verification Services – Rules governing ActivFire Scheme and is valid only for the product(s) as submitted for evaluation and verification of conformity, subject to the following conditions.

- Reference to details, limitations and requirements, where documented as a schedule/enclosure with this certificate.
- The Registrant is responsible for their attestation of conformity and ensuring that on-going production complies with the conformance criteria defined in this certificate.
- This certificate will not be valid if any changes or modifications are made to the product which have not been notified and validated by CSIRO Verification Services.
- This certificate is subject to periodical re-validation upon verification that all requirements, as determined by the conformity assessment body, continue to be satisfactorily met by the Registrant.
- This certificate may only be reproduced in its published form, without modification and inclusive of all schedules/enclosures.
- Any changes, errors or omissions, must be submitted in writing and if necessary or requested, substantiated with relevant evidence.
- Any representations, such as advertising or other marketing related activities or articles shall reflect the correct contents of this certificate and conform with all relevant trade practices and consumer protection legislation and regulations.
- Any terms or conditions of use as applicable to content and documentation as published or accessed through web sites administered by the CSIRO Verification Services.

Issued by

David Whittaker
Executive Officer – ActivFire Scheme



Schedule to Certificate of Conformity

Certificate num.	Registration date	Version		Valid until	Page 2 of 4
afp - 2447	17-Sep-2010	Number 10	Issue date 27-Apr-2019	30-Apr-2020	

Producer's description

The ROMTECK, Model RM2118 GPRS-PSTN-ASE-F, alarm signalling equipment forms part of a computer aided dispatch and fire alarm monitoring system, known as the Romteck Automatic Fire Alarm System. This product is a microprocessor based device, used within buildings requiring a fire alarm installation, and provides the interface to the Romteck fire system.

Each ASE acts as an interface between a direct brigade alarm (containing contacts which open or close in the event of alarm) and the Alarm Concentrator or Alarm Server. Each Alarm Concentrator continuously monitors the ASE's connected to it. Utilising IP as the primary connection allows for a fast response primary link (Typically < 2 seconds) with a reliable dial backup in case of primary link loss.

The main functions of the ASE are to:

- On change of state send the current status of its Alarm inputs.
- Monitor the ASE supply and report status.
- Time stamp all events for accurate traceability.
- Log all activity for audit trail capability.
- Provide the ability to test alarm circuits without the need for operator intervention.
- Provide the ability to Isolate the ASE without operator intervention.
- Provide indicators to show the presence of Fire, Fault, Zone Isolate and line faults on each of up to 8 independent circuits.
- Provide dual communications paths for high reliability and network backup.
- Supports GPRS, and PSTN communications.
- Monitor and report the status of both primary and secondary communications channels.
- Automatically change to backup communications in case of loss of primary communications channel.
- Automatically report any loss of either communications path.
- Provide periodic reporting capability via secondary link.

In order to provide these functions the ASE has the following features:

- Real Time Clock for accurate event stamping.
- Non volatile memory for configuration and log storage (up to 220 events logged).
- 8 Fully monitored alarm input circuits (3 states per circuit Alarm, Fault and Zone Isolate).
- An independent indicator for each alarm input.
- 2 open collector outputs.
- Optional Buzzer output for local alerting.
- GSM modem interfaces supported.
- PSTN line interface with option to share phone line.
- RS485 interface.
- RS232 interface for configuration, diagnostics or monitoring.
- Test / Isolate key switch.
- Off Hook indicator for PSTN.
- Communications link status indicator.

Schedule to Certificate of Conformity

Certificate num.	Registration date	Version		Valid until	
afp - 2447	17-Sep-2010	Number 10	Issue date 27-Apr-2019	30-Apr-2020	Page 3 of 4

Technical specification

The following details are a representative extract of the technical specification for the ROMTECK, Model RM2118 GPRS-PSTN-ASE-F, alarm signalling equipment and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

Physical

Width:	110 mm
Height:	110 mm
Depth:	66 mm
Weight:	350 grams

Data transmission

PSTN Line

Transmission rate: 2400 baud dial backup or 14400 baud IP over PSTN

Mode: QPSK V.22 BIS for dial up V.32bis for IP over PSTN

FSK Frequencies: 1200 Hz (Originate)

2400 Hz (Answer)

Transmission format: 1 start bit, 8 data bits, no parity, 1 stop bit.

GPRS

Mode: Quad band 850 / 900 / 1800 / 2100 MHz.

Requires external antennae – SMA connector (Read warning regarding Antenna location in chapter 3).

HSDPA

Mode: Tri band 850 1800 / 2100 MHz.

Requires external antennae – SMA connector (Read warning regarding Antenna location in chapter 3).

Poll sequence

IP LINK

Poll repetition rate: Set by heartbeat period. Typically 40 seconds – unsolicited sending of alarms.

Poll time-out: 5 retries @ 10 seconds.

PSTN Line

Only connected when an alarm occurs or for periodic dial. Monitored continuously for availability, alarming on loss of line connection. Periodic reporting period configurable, default 24 hours.

Power supply

Power feed voltage (at ASE): 8-35V DC - polarity sensitive

Regulated circuit voltage: 3.6V nominal

Reset voltage detector: 3.0V

Typical current drain: 24V operation (4 alarm circuits populated – 40 second heartbeat)

Receive current – 33mA

Average current – 36mA

Transmit current – 59mA

Typical current drain: 24V operation (8 alarm circuits populated – 40 second heartbeat)

Receive current – 48mA

Average current – 51mA

Transmit current – 64mA

Typical current drain: 12V operation (4 alarm circuits populated – 40 second heartbeat)

Receive current – 38mA

Average current – 42mA

Transmit current – 80mA

Typical current drain: 12V operation (8 alarm circuits populated – 40 second heartbeat)

Receive current – 53mA

Average current – 56mA

Transmit current – 95mA

NOTE: Average current is dependant upon the number of alarm circuits populated and the poll rate of the GPRS heartbeat. If unsure about your installation, use the 8 alarm inputs populated values.

Low Battery Detection via software with alarm reporting.

Schedule to Certificate of Conformity

Certificate num.	Registration date	Version		Valid until	Page 4 of 4
afp - 2447	17-Sep-2010	Number 10	Issue date 27-Apr-2019	30-Apr-2020	

An ACA approved and EMI conforming power supply is required to ensure compliance with safety standards.

Operating conditions

Temperature range: -10 deg C. to +50 deg C.

Humidity: 10 % to 95 % non - condensing.

Mechanical shock

Withstands free fall test to BS2011: Part 1.2Ed (IEC 68-2-32. Procedure 1, severity 1000mm, two free falls in each of 3 mutually perpendicular orientations) without damage.

Impulse withstand

Tested to AS 2481 - 5KV impulse test.

Alarm inputs

8 x monitored inputs requires voltage free contacts and resistor network as described in Section 3

Open collector outputs

Max voltage: 30Vdc

Max current: 100mA

Note: Flyback diode required when used to drive relay or inductive load.