



Implementor's Manual

ARRI Transceiver EMIP300

FCC ID: Y7N-EMIP300

IC: 9482A-EMIP300



1. Introduction/Description

ARRI EMIP 3.00 (EMIP300)

This document gives information regarding ARRI radio module EMIP 3.00 (EMIP300) for ARRI Wireless Remote System units.

This document gives labelling of ARRI Wireless Remote System units with radio transceiver module:
FCC ID: Y7N-EMIP300 IC: 9482A-EMIP300.

The transceiver module uses an IEEE 802.15.4 SMAC based HW/SW MKW2x platform from Freescale with an additional external Skyworks SE2436L amplifier stage. Frequency range is the ISM 2.4 GHz. Modulation scheme used is DSSS (Direct Sequence Spread Spectrum).

The module is intended only for internal use of ARRI and authorized OEM's which provide a power supply regulation of 3.3V according to the operation area of the radio.

2. Operating Area

Supply Voltage: 3.3V \pm 2.5%

Temperature Range: -20°C - +60°C

ARRI	Document Number	Ident Number	Name	Date	Page
ECS			A-A	01.05.15	1 of 7



Implementor's Manual

ARRI Transceiver EMIP300

FCC ID: Y7N-EMIP300

IC: 9482A-EMIP300



3. The radio uses up to 16 dedicated channels:

Zigbee Ch. Nr.	Frequency
11	2405 MHz
12	2410 MHz
13	2415 MHz
14	2420 MHz
15	2425 MHz
16	2430 MHz
17	2435 MHz
18	2440 MHz
19	2445 MHz
20	2450 MHz
21	2455 MHz
22	2460 MHz
23	2465 MHz
24	2470 MHz
25	2475 MHz
26	2480 MHz

4. Detailed Description

PRECAUTION: This Implementor's Manual requires special skills and knowledge of the WRS Units. Please read this instruction carefully and start working only if you feel safe about completing it. If not, please contact ARRI Austria Service:

Phone: +43/1/8920107-65
Fax: +43/1/8920107-12

ATTENTION
Static sensitive components

ARRI	Document Number	Ident Number	Name	Date	Page
ECS			A-A	01.05.15	2 of 7



Implementor's Manual

ARRI Transceiver EMIP300

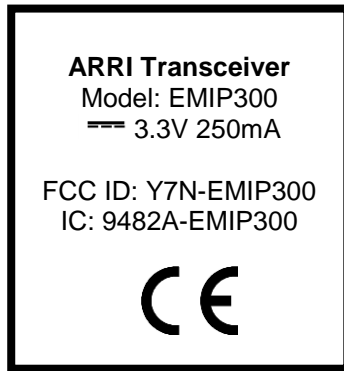
FCC ID: Y7N-EMIP300

IC: 9482A-EMIP300



5. Radio Label Dimensions and Specifications

Material: Polyester, self adhesive, 19mm x 19mm



Label position on radio

ARRI	Document Number	Ident Number	Name	Date	Page
ECS			A-A	01.05.15	3 of 7



Implementor's Manual

ARRI Transceiver EMIP300

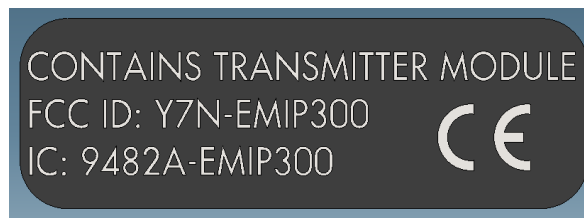
FCC ID: Y7N-EMIP300

IC: 9482A-EMIP300



6. Exterior Label Dimensions and Specifications

Material: Foil, FTC-ultra, self adhesive, 30mm x 10mm



ARRI	Document Number	Ident Number	Name	Date	Page
ECS			A-A	01.05.15	4 of 7



Implementor's Manual

ARRI Transceiver EMIP300

FCC ID: Y7N-EMIP300

IC: 9482A-EMIP300



7. Antenna Connectors and Mode of Operation

The module is equipped with two MMCX connectors. During receive mode, the module can switch between these terminals until a valid packet is received. This antenna connector is used subsequently also for transmission until return to receive. Thus, the module uses only one antenna at a reception and transmission cycle.

8. Antenna List

Manufacturer	Ordering Information	Gain	Radiation Pattern
Radiall/Larsen	R380.500.125	2 dBi	Omni-directional
Nearson	S131AM-2450S	2 dBi	Omni-directional
HFB Elektronik	WLAN Antenna 2.4GHz	-2.6 dBi	Omni-directional

Similar antennas with smaller or equal gain can also be used.

ARRI	Document Number	Ident Number	Name	Date	Page
ECS			A-A	01.05.15	5 of 7



Implementor's Manual

ARRI Transceiver EMIP300

FCC ID: Y7N-EMIP300

IC: 9482A-EMIP300



9. FCC and IC statements

The following phrases need to be included in the final user manual of the end product:

Canadian Compliance Statement

Complies with the Canadian ICES-003 Class A specifications.

Cet appareil numérique de la Classe A est conforme à la norme NMB-003 du Canada.

This Class A device meets all the requirements of the Canadian interference-causing equipment regulations.

Cet appareil numérique de la Classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

This device complies with RSS 210 of Industry Canada.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

(1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

FCC Compliance Statement

Section 15.19

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Section 15.21 Information to user

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

Note: This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

Section 15.105(a)

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This device complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and should be installed/operated with minimum distance 20 cm between the radiator & your body.

ARRI	Document Number	Ident Number	Name	Date	Page
ECS			A-A	01.05.15	6 of 7



Implementor's Manual

ARRI Transceiver EMIP300

FCC ID: Y7N-EMIP300

IC: 9482A-EMIP300



RF Exposure statement

The modular approved transmitter complies with the RF Exposure requirements for fixed or mobile installations / categorised host devices where a minimum separation distance of at least 20 cm between the radiating part and any human body can be assured under normal operating conditions.

For any technical questions please call
ARRI Austria +43 1 892 01 07-65
or send an e-mail to service@arri.at

ARRI	Document Number	Ident Number	Name	Date	Page
ECS			A-A	01.05.15	7 of 7